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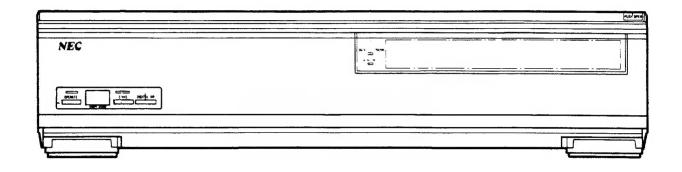
COLOR VIDEO CASSETTE RECORDER

SERVICE MANUAL

PART NO. 549-91-0494



Better Service Better Reputation Better Profit



SPECIFICATIONS

Format

Recording system

Video signal system

Tape width Tape speed

Maximum recording time

Temperature operating storage

Channel coverage

Antenna output

Power consumption Power requirement

Video Input Output S/N ratio

Horizontal resolution

: 625 S-VHS/VHS PAL standard

Rotary, slant azimuth 4-head helical

scanning system

PAL colour and CCIR monochrome signal, 625 lines.

12.65 mm (1/2 inch)

SP: 23.39 mm/sec.

LP: 11.70 mm/sec

SP: 240 min. with E-240 video cassette

LP: 480 min. with E-240 video cassette

5°C to 40°C

-20°C to 60°C

VHF VL: 47 - 118 MHz VHF VH: 118 - 300 MHz

UHF U: 470 - 862 MHz Channel 30 - 39, adjustable

Channel 0 or 1 (switchable) 75 ohms, unbalanced

: 55 Watts

: AC 220V \sim ,50 Hz

: 0.5 to 2.0 Vp-p, 75 ohms unbalanced

: 1.0 \pm 0.1 Vp-p, 75 ohms unbalanced More than 43 dB (Digital NR off)

More than 49 dB (Digital NR on)

More than 400 lines (S-VHS)/240 lines (VHS) with the SHARPNESS control at

center position.

S-VIDEO Input Luminance

Colour

S-VIDEO Onput Luminance

Colour

Normal Audio

Input Output

S/N ratio

Frequency range

Hi-Fi Audio (AFM)

Input

Output Dynamic Range

Channel Separation

Frequency Response

Miscellaneous

Timer

Backup time

Dimensions

Weight

Provided accessories

(Y): 1.0 Vp-p, 75 Ω unbalanced

(C): 4.43 MHz burst, 0.286 Vp-p,

75 Ω unbalanced

(Y): 1.0 Vp-p, 75 Ω unbalanced

(C): 4.43 MHz burst, 0.286 Vp-p,

75 Ω unbalanced

: -8 dBs. 47 kΩ unbalanced

: ~8 dBs, high impedance load

: More than 40 dB

: 100 Hz to 10,000 Hz

: -18 dBs, 47 kΩ unbalanced

: -8 dBs, high impedance load

: More than 90 dB

: More than 60 dB

: 20 Hz to 20 kHz

: Maximum 1-year/4-event

: 24 hours

: 430mm (W) × 104mm (H)

× 382mm (D)

: 9.6 kg

: Remote control unit

Antenna cable

Size AA batteries (2 pieces) Y-C separate connector cable

(S-video cable)

Audio cable Design and specifications are subject to change without notice.

NEC Corporation

TOKYO, JAPAN

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SECTION 1

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, the products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

- Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.
- 2. Parts identified by the \triangle symbol and shaded (parts are critical for safety.

Replace only with specified part numbers.

Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

- 3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
- Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers
 - 4) Insulation sheets for transistors
- When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering. (Fig. 1)
- Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)
- Check that replaced wires do not contact sharp edged or pointed parts.
- 8. When a power cord has been replaced, check that 10 15 kg of force in any direction will not loosen it. (Fig. 2)
- 9. Also check areas surrounding repaired locations.

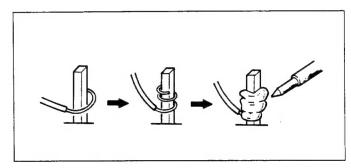


Fig. 1

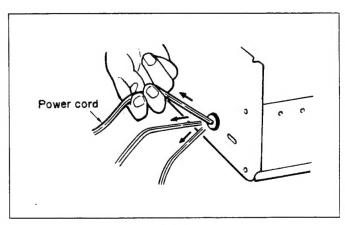


Fig. 2

10. Products using cathode ray tubes (CRTs) In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the parts specified. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) See table below.

3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

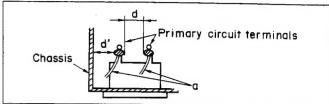


Fig. 3

Table 1: Ratings for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')	
100V	Japan	≥ 1 MΩ/500V DC	1 kV 1 minute	≧ 3 mm	
110 to 130V	U.S.A. & Canada		900V 1 minute	≧ 3.2 mm	
*110 to 130V 200 to 240V	Europe Australia	≥ 10 MΩ/500V DC	4 kV 1 minute	≥ 6 mm (d) ≥ 8 mm (d') (a Power cord)	

^{*} Class II model only.

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

4. Leakage current test

Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method: (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure and following table.

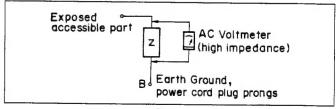


Fig. 4

Table 2: Leakage current ratings for selected areas

AC Line Voltage	V Japan i ≤ 1mArms		Leakage Current (i)	Earth Ground (B) to: Exposed accessible parts	
100V			i ≦ 1mArms		
110 to 130V			Exposed accessible parts		
110 to 130V	Europe		$i \le 0.7mA$ peak i = 2mA dc	Antenna earth terminals	
200 to 240V	Australia		i ≤ 0.7mA peak i = 2mA dc	Other terminals	

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

WARNING

- This set is for exclusive use with the PAL colour system (system B and G).
- SECAM (system B and G) colour programmes might be recorded in certain areas but there is no interchangeability of these recorded cassette tapes with other PAL-VHS recorders or SECAM-VHS recorders.
- Please use the exclusive SECAM-VHS recorder in SECAM broadcasting areas.
- Please use only PAL prerecorded cassette tapes or PAL signals which have been recorded with the PAL-VHS system.
- For camera recording, connect a video camera built to the PAL standard.

IMPORTANT: It is permissible to record television programs only in the event that third party copyrights and other rights are not violated.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION

Dangerous voltage inside. Refer internal servicing to qualified service personnel. To prevent electric shock or fire hazard, remove the power cord from the AC outlet prior to connecting or disconnecting any signal lead or aerial.

Even if VCR OPERATE button is in "OFF" position, parts of the unit are still connected to the mains.

NOTE: The rating plate and the safety caution are on the rear of the unit.

CAUTION: When you are not using the VCR for a long period of time, it is recommended that you disconnect the power cord from AC outlet.

This instruction manual is important to you.

Please read it. In a brief, concise manner, it shows exactly how to connect, operate and adjust the VCR for best performance. It can save you money. It shows you simple things to do and check before you call for help...So you may save the cost of unnecessary service.



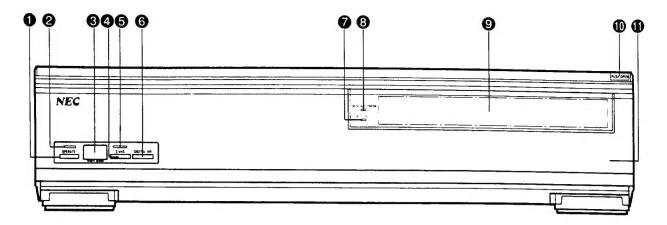
Only cassettes marked "VHS" can be used with this video cassette recorder.

VHS High Quality technology is incorporated into VCR's marked "HQ". This unit is compatible with conventional VHS VCR's.

NOTE: The pages (1-3 to 1-6) in this Service Manual were used from the Owner's Manual without any modification.

CONTROLS AND COMPONENTS

FRONT VIEW



OPERATE Button

This Button is used to turn the VCR on and off.

OPERATE Indicator

This indicator lights when the unit's power is on.

Remote Sensor

This sensor receives signals from the remote control.

S-VHS Button

This Button is used to select the S-VHS mode for recording on an S-VHS video cassette.

6 S-VHS Indicator

The S-VHS indicator lights when the VCR is in the S-VHS mode.

6 DIGTAL NR (Noise Reduction) Button

Press this Button to activate the Digital noise reduction circuit to reduce video noise.

♠ AUDIO REC Indicator

This Indicator lights when Audio Dubbing is being performed.

8 DIGITAL AUTO TRACKING Indicator

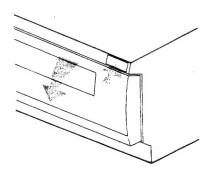
This indicator lights when AUTO TRACKING is on.

DISPLAY

Refer to page 12.

® PUSH OPEN Button

This Button is used to open the Front compartment.

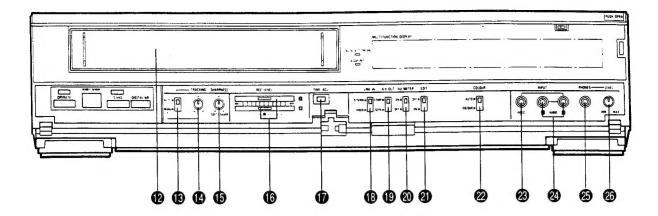


Front Compartment

Refer to the next page.

CONTROLS AND COMPONETNTS (Cont'd)

FRONT COMPARTMENT



Cassette Compartment

® TRACKING Select Switch

This switch is used to select between automatic or manual tracking. Tracking is adjusted automatically when this switch is set to the "AUTO" position.

This control is used to fine tune the picture during playback to eliminate or reduce noise bars when the TRACKING Select Switch is set to "MANU".

6 SHARPNESS Control

Turn this control to the left to soften the picture, and to the right to sharpen it.

REC LEVEL Control

The recording level of Hi-Fi audio signals should be manually adjusted. For adjustment, slide the REC LEVEL controls while referring to the level meters.

TIME ADJ. Button

This Button is used for Clock Setting. Refer to page 17.

@ LINE IN Select Switch

This switch is used to select the input terminal when recording from an external source. Set the INPUT select Button to LINE, then select the input terminal with the LINE IN Select Switch.

S-TERM

: This position is used when recording signals from equipment connected to the S-VIDEO IN terminal. The audio signals are received through the Front or Rear AUDIO IN terminals.

VIDEO

: This position is used when recording signals from equipment connected to the Front or Rear VIDEO IN terminal.

A/V OUT Switch

This switch is used when selecting between the composite video signal or the separate video signal from the 21 pin scart connector.

You will have a clearer picture when you select the "SEPA" position if you use a TV where the separate video input is possible from the 21 pin scart connector.

WATER Select Switch

 ON : The meters show the audio levels for the left and right channels.

OFF: The meters are off.

2 EDIT Switch

ON : Used when dubbing from one VCR to another using the video and audio line input and output terminals on the VCR.

OFF: Normally set to this position.

20 AUTO/COLOR Select Switch

AUTO : Color or B/W mode is automatically selected. Set to this position for normal use.

COLOR: Set to this position when the input or playback video signal is in color.

FRONT VIDEO IN Terminal

For connection of another VCR, a portable video camera, or other video output to this VCR.

This terminal has priority over the rear VIDEO IN terminal.

FRONT AUDIO IN Terminals

For connection of a stereo system, tuner, portable video camera, external sound equipment, or another VCR to this VCR. This terminal has priority over the rear AUDIO IN terminals.

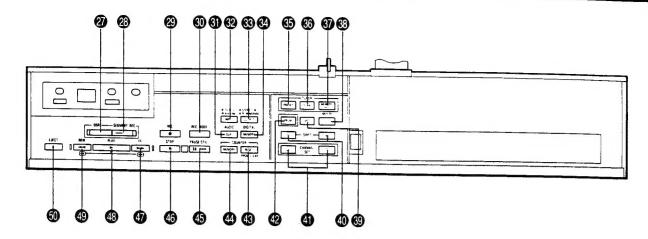
PHONES Jack

Connect stereo headphones to this jack to monitor audio.

39 PHONES LEVEL Control

The headphone volume is adjusted using this control.

CONTROLS AND COMPONENTS (Cont'd)



DSR Button

Use this Button to set the timer for the VCR to begin recording automatically when using the Segment Record feature.

The start time can be delayed up to 24 hours. Refer to page 39.

23 SEGMENT REC Button

This Button is used to initiate the Segment Recording function and set the recording length. Refer to page 39.

REC Button

This Button is used to begin recording.

® REC MODE Select Button

This Button is used to select the recording speed, the recording speed selected is indicated in the display. It is only necessary to select the tape speed when recording; the correct playback speed is automatically selected.

AUDIO DUB Button

This Button is used to dub a new audio programme on to the normal audio track. Refer to page 45.

1 INPUT Select Button

The input changes in the following order with each press of this Button: TV \rightarrow SC \rightarrow A/V (LINE)

TV : To recor

: To record signals coming from the

built-in tuner.

SC (SIMULCAST): To record the video signal from the

built-in tuner and the audio signal from the REAR (RCA) AUDIO IN terminals. When recording FM simulcast TV programs, use this position.

(SC) appears in the display.)

A/V (LINE) : To record signals coming from equipment connected to the Front or

Rear VIDEO and AUDIO IN terminals. (80 appears in the channel indicator position in the display.)

OUTPUT Select Button

For selecting the audio output signals from the AUDIO OUT Terminals (L and R), PHONES jack, and RF OUT terminal.

Each time this Button is pressed, the output changes in this order: Stereo \rightarrow Left \rightarrow Right \rightarrow Normal. The output mode currently selected can be checked by referring to the Level Meters.

SELECTOR POSITION	AUDIO OUT TERMINAL		HEADPHONES		RF OUT	L&R
7 00/110/1	L	R	L	R		Indicators
STEREO	L,	R	L	R	L+R	L&R
L	Ļ	L	L	L	L	L
R	R	R	R	R	R	R

When this Button is set to the NORMAL position, monaural sound is heard from both the left and right channels. (The L and R Indicators are off.)

® DIGITAL MEMORY Button

When pressed during playback, a Stop Action picture is displayed, while the tape continues to run in real time. When pressed while monitoring a TV program through the VCR's built-in tuner, a still picture is displayed while the TV program continues live.

5 PRESET Button

This Button is used to set the VCR to the Channel Presetting mode.

® SCAN Button

This Button is used for Channel Presetting.

The channel tuning moves to a higher channel by pressing this Button.

☞ MEMORY/SHIFT Button

This Button is used for Channel Presetting.

This Button is pressed to enter a tuned channel into memory.

CONTROLS AND COMPONENTS (Cont'd)

® TIMER REC Button

This Button is used to set the VCR for automatic Timer Recording. When this Button is pressed, the Timer Recording Indicator [22] lights in the display. While this indicator is on, the unit is under the control of the timer and cannot be operated manually.

VPS Button

This button is used to switch the VPS mode on and off.

SHIFT (−)/(+) Buttons

These Buttons are used for Time and Date Setting and Timer Programming.

Used to select the specific channel which you wish to view or record. Also used during Time and Date Setting and Timer Programming.

PRGM (Program) Button

This Button sets the VCR to the Timer Programming mode.

⚠ COUNTER RESET/PROGRAM CLEAR Button

Pressing this Button during normal operation resets the tape counter to 0H00M00S.

Pressing this Button during timer programming clears the Timer information for the Programme being displayed.

4 COUNTER MEMORY Button

This Button is used to automatically stop the tape at 0H00M00S during rewind or fast forward.

49 PAUSE/STILL Button

This Button is used to stop tape movement during recording, or to stop the tape and display a Still picture during playback.

6 STOP Button

This Button is used to stop the tape.

FF (Fast Forward/Cue) Button

This Button is used to:

- A) move the tape forward rapidly.
- B) search the picture during playback.

49 PLAY Button

This Button is used to begin playback.

REW (Rewind/Review) Button

This Button is used to:

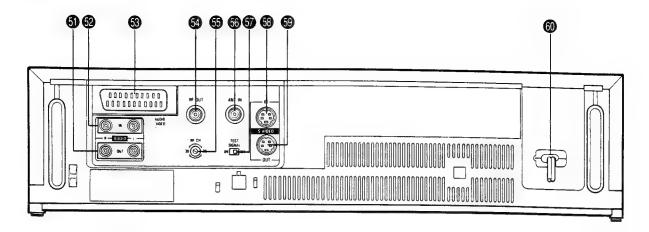
- A) rewind the tape rapidly.
- B) search the picture during playback.

EJECT Button

This Button is used to remove the cassette.

CONTROLS AND COMPONENTS (Cont'd)

REAR VIEW



5 REAR AUDIO OUT Terminals

For audio connection of this VCR to a stereo system, monitor, or another VCR.

32 REAR AUDIO IN Terminals

For connection of a stereo system, tuner, portable video camera, external sound equipment or another VCR to this VCR. For this purpose, the INPUT Select Button should be placed in the "A/V" position.

21-Pin SCART connector (Audio/Video connector) This is a 21-Pin SCART connector for connection to a

This is a 21-Pin SCART connector for connection to a stereo TV equipped with the same type of connector.

60 RF OUT Connector

Connector to the antenna terminal of a TV with the antenna cable (provided).

6 RF CHANNEL Select Switch

This screw is used to select the TV signal transmitted from the RF OUT connector. Set this screw to the vacant channel (30 – 39), which is not used for TV broadcasting.

69 ANT IN Terminal

This terminal is used to connect a TV antenna or cable TV cable to the VCR.

TEST SIGNAL Switch

Normally, set this switch to the OFF position. This switch is used when tuning your TV to the VIDEO CHANNEL.

5 S-VIDEO IN Terminal

This terminal is used to connect a television or VCR which has an S-VIDEO OUT terminal to this VCR.

59 S-VIDEO OUT Terminal

This terminal is used to connect the VCR to a television or VCR which has an S-VIDEO IN terminal.

Power Cord

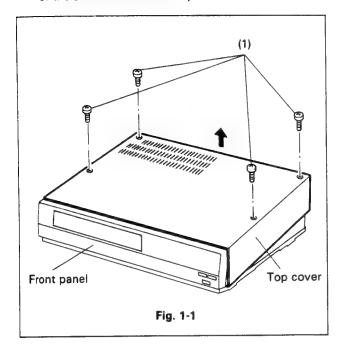
Connect to an AC 220V, 50 Hz outlet.

SECTION 2 DISASSEMBLY

1. REMOVING THE CASE

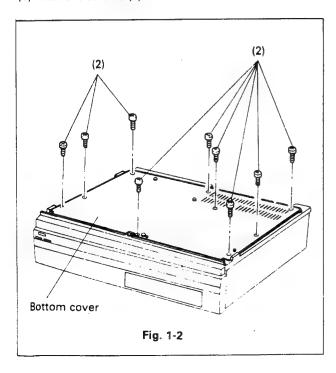
1-1. TOP COVER (Figure 1-1)

- (1) Remove screws (1) on the top cover.
- (2) Lift the rear of the top cover to release it in the direction of the arrow from the front panel.



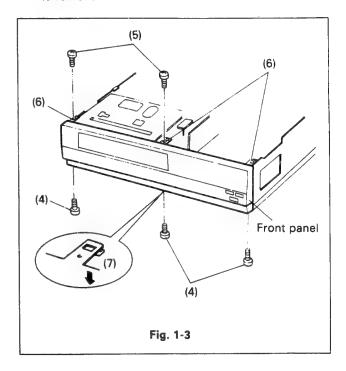
1-2. BOTTOM COVER (Figure 1-2)

(1) Remove screws (2) on the bottom cover.



1-3. FRONT PANEL (Figure 1-3)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the bottom cover. (Refer to Item 1-2.)
- (3) Remove screws (4) on the bottom of the front panel.
- (4) Remove screws (5) on the top of the front panel.
- (5) Release tabs (6).
- (6) Release three tabs (7), and tilt the front panel forward to remove.

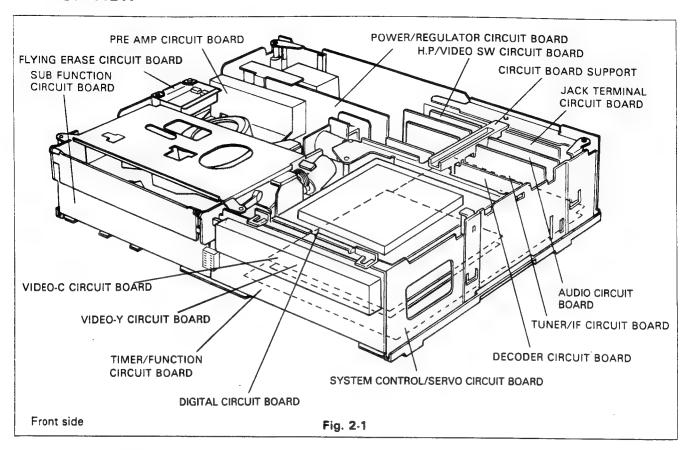


Note: When removing the front panel, take care not to break the flat cables from the front panel main unit.

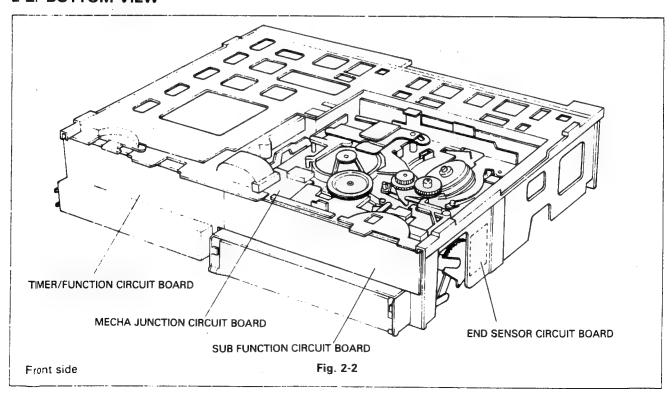
After releasing tabs (7), be sure to handle the tab set very carefully; Otherwise, the released tabs may return to their original locked positions.

2. CIRCUIT BOARD LOCATIONS

2-1. TOP VIEW



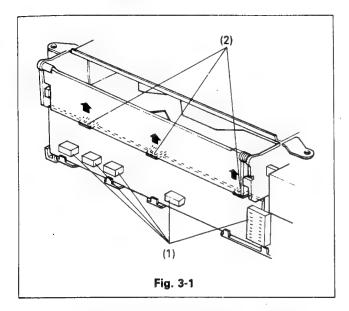
2-2. BOTTOM VIEW



3. REMOVING THE CIRCUIT BOARDS

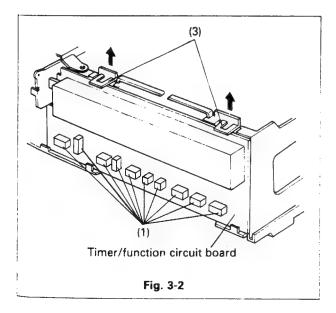
3-1 SUB FUNCTION CIRCUIT BOARD (Figure 3-1)

- Remove the top cover, bottom cover, front panel. (Refer to Items 1-1, 1-2 and 1-3).
- (2) Remove two wire connectors (1) from the sub function circuit board.
- (3) Release three tabs (2) on the top of the circuit board and lift the circuit board to remove.



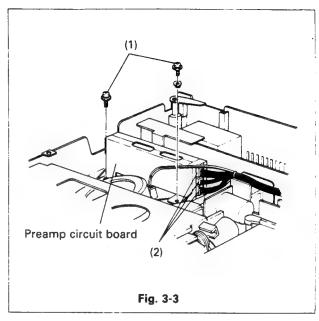
3-2. TIMER/FUNCTION CIRCUIT BOARD (Figure 3-2)

- (1) Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Disconnect wire connectors (1) from the circuit board.
- (3) Release tabs (2), and lift the circuit board to remove.



3-3. PREAMP CIRCUIT BOARD (Figure 3-3)

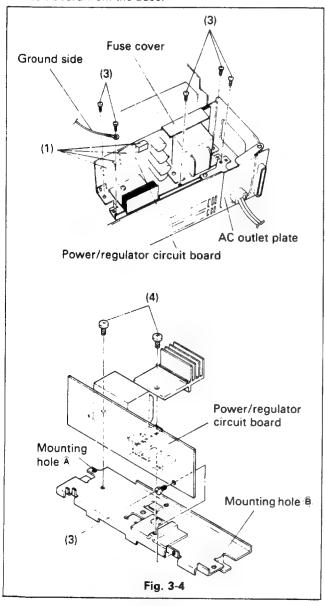
- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1).
- (3) Disconnect wire connectors (2) from the circuit board.



Note: Be very careful not to damage the drum head circuit board when removing the preamp circuit board.

3-4. POWER/REGULATOR CIRCUIT BOARD (Figure 3-4)

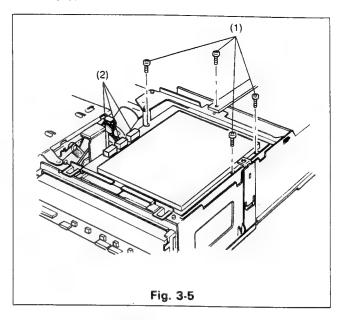
- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the bottom cover. (Refer to Item 1-2.)
- (3) Remove the fuse cover.
- (4) Disconnect wire connectors (1) from the circuit board.
- (5) Disconnect wire connectors (2) from the S/S circuit board.
- (6) Remove screws (3).
- (7) Lift the power/regulator unit together with the AC outlet plate to remove.
- (8) Remove screws (4) to release the power/regulator circuit board from the base.



Note: To install the power/regulator unit, align the mounting pins with mounting holes A and B.

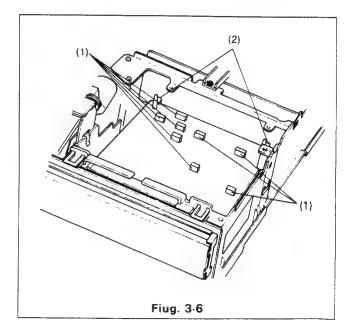
3-5. DIGITAL CIRCUIT BOARD (Figure 3-5)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1).
- (3) Disconnect the connectors (2) from the digital circuit board.



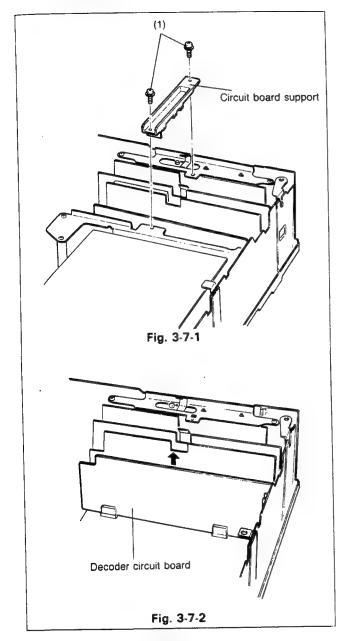
3-6. VIDEO CIRCUIT BOARD (Figure 3-6)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the digital circuit board. (Refer to Item 3-5.)
- (3) Remove the wire connectors (1) from the digital circuit board.
- (4) Release tabs (2), and remove the circuit board.



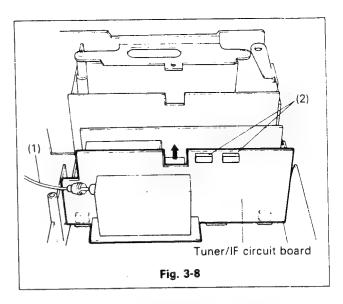
3-7. DECODER CIRCUIT BOARD (Figure 3-7)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove screws (1), and remove the circuit board support. (Figure 3-7-1.)
- (3) Lift up the decoder circuit board vertically to remove. (Figure 3-7-2.)



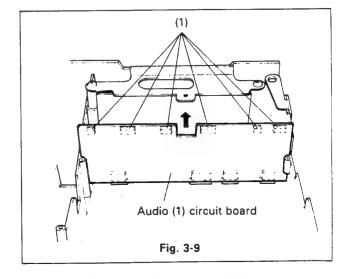
3-8. TUNER/IF CIRCUIT BOARD (Figure 3-8)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Remove the cable (1).
- (4) Disconnect the wire connector (2) from the circuit board
- (5) Remove the tuner/IF circuit board by pulling it up vertically.



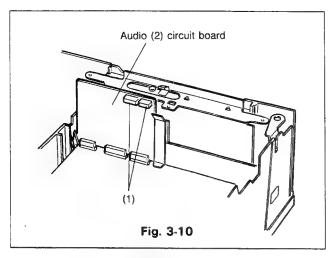
3-9. AUDIO (1) CIRCUIT BOARD (Figure 3-9)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect wire connectors (1) from the circuit board.
- (4) Lift up the audio (1) circuit board vertically to remove.



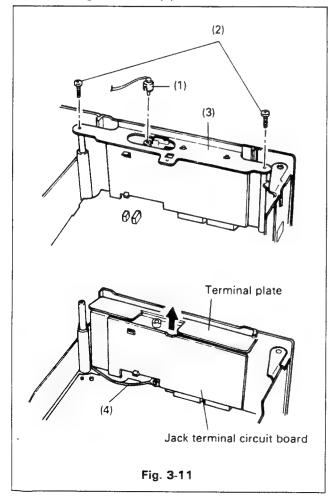
3-10. H-P/VIDEO CIRCUIT BOARD (Figure 3-10)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect the wire connector (1) from the circuit board.
- (4) Lift up the audio (2) circuit board vertically to remove.



3-11. JACK TERMINAL CIRCUIT BOARD (Figure 3-11)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Disconnect cable (1).
- (4) Remove screws (2).
- (5) Remove the holder plate (3).
- (6) Lift up the jack terminal circuit board vertically to remove.
- (7) Remove ground wire (4).

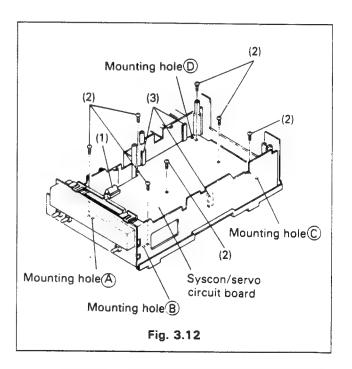


Note:

- 1. The jack terminal circuit board is united with the terminal plate.
- 2. To install the jack terminal unit, fit the terminal plate into the mounting position until it clicks in the locked position.

3-12. SYSCON/SERVO CIRCUIT BOARD (Figure 3-12)

- (1) Remove the top cover. (Refer to Item 1-1.)
- (2) Remove the circuit board support. (Same as digital circuit board support as shown in Figure 3-7-1.)
- (3) Remove the digital circuit board. (Refer to Item 3-5.)
- (4) Remove the video circuit board. (Refer to Item 3-6.)
- (5) Remove the decoder circuit board. (Refer to Item 3-7.)
- (6) Remove the tuner/IF circuit board. (Refer to Item 3-8.)
- (7) Remove the audio (1) circuit board. (Refer to Item 3-9.)
- (8) Remove the jack terminal circuit board. (Refer to Item 3-11.)
- (9) Disconnect flat cable (1).
- (10) Disconnect all connectors.
- (11) Remove screws (2).
- (12) Remove tab (3).
- (13) Lift up the syscon/servo circuit board vertically to remove.

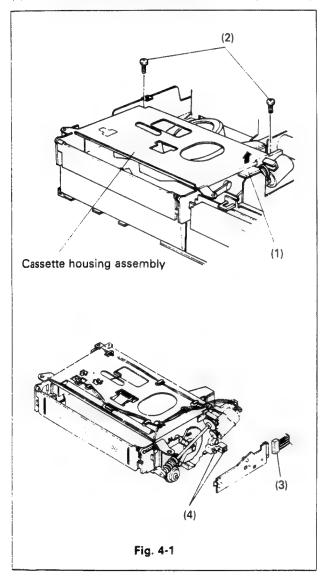


Note: To install the syscon/servo circuit board, align the mounting pins with mounting holes (A), (B), (C) and (D).

4. REMOVING THE CASSETTE MECHANISM

4-1. REMOVING THE CASSETTE HOUS-ING ASSEMBLY (Figure 4-1)

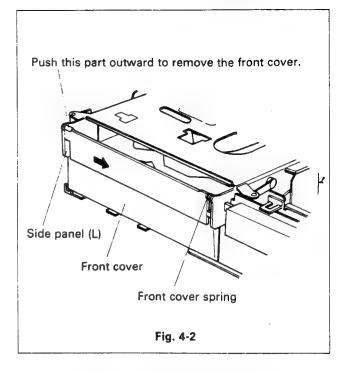
- Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Lift up the reinforcing metal plate (1) to remove.
- (3) Remove screws (2). Pull up the rear part of the cassette housing assembly and pull backwards 4 — 5mm carefully to release the tab of the front side of the cassette housing assembly from the chassis. Then carefully pull it out upwards.
- (4) Disconnect connector (3).
- (5) Release tab (4) to remove cassette housing assembly.



Note: The removed two screws (2) should be used again to reinstall the cassette housing assembly. Never use screws other than removed ones.

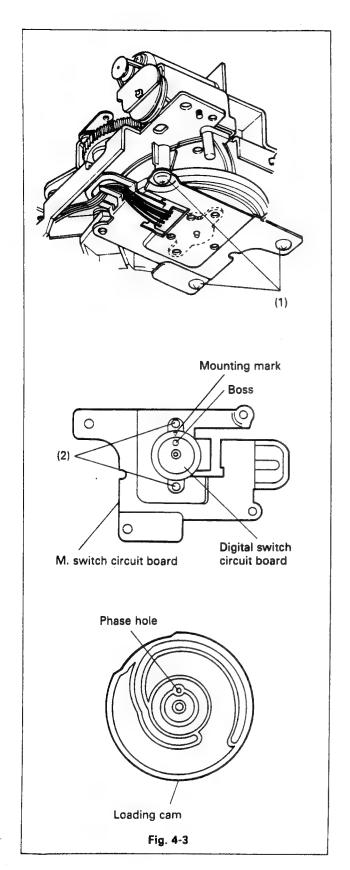
4-2. FRONT COVER (Figure 4-2)

- (1) Remove the top cover, bottom cover and front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Push the side panel (L) outward, and remove the front cover together with the front cover spring while pushing the front panel to the arrow direction.



4-3. M. SWITCH ASSEMBLY (Figure 4-3)

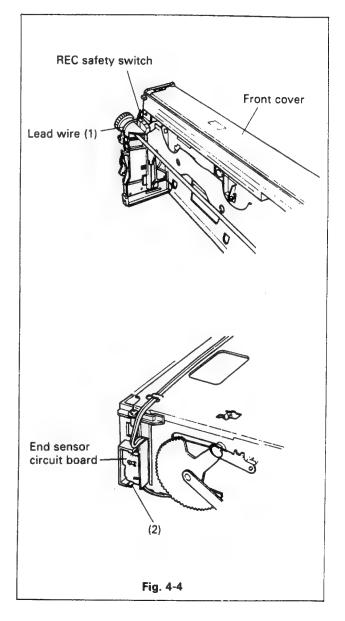
- (1) Remove the bottom cover. (Refer to Item 1-2.)
- (2) Remove screws (1).
- (3) Disconnect connector from the mecha junction circuit board to remove the M. switch assembly.
- (4) Remove screws (2) to remove the digital switch assembly.



Note: When installing the M. switch assembly, align the loading cam phase hole with the digital SW boss.

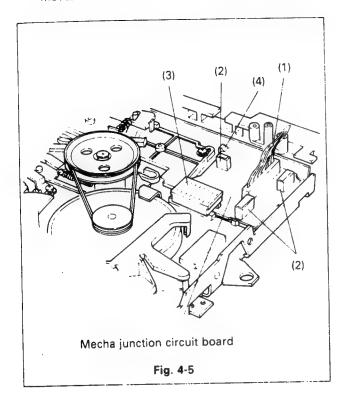
4-4. END SENSOR CIRCUIT BOARD (Figure 4-4)

- (1) Remove the top cover, bottom cover and the front panel. (Refer to Items 1-1, 1-2 and 1-3.)
- (2) Remove the cassette housing assembly. (Refer to Item 4-1.)
- (3) Remove the solder from the two lead wires (1) of the REC safety Switch located under the front cover.
- (4) Release tab (2) toward the bottom, and lift the end sensor circuit board to remove.



4-5. MECHA JUNCTION CIRCUIT BOARD (Figure 4-5)

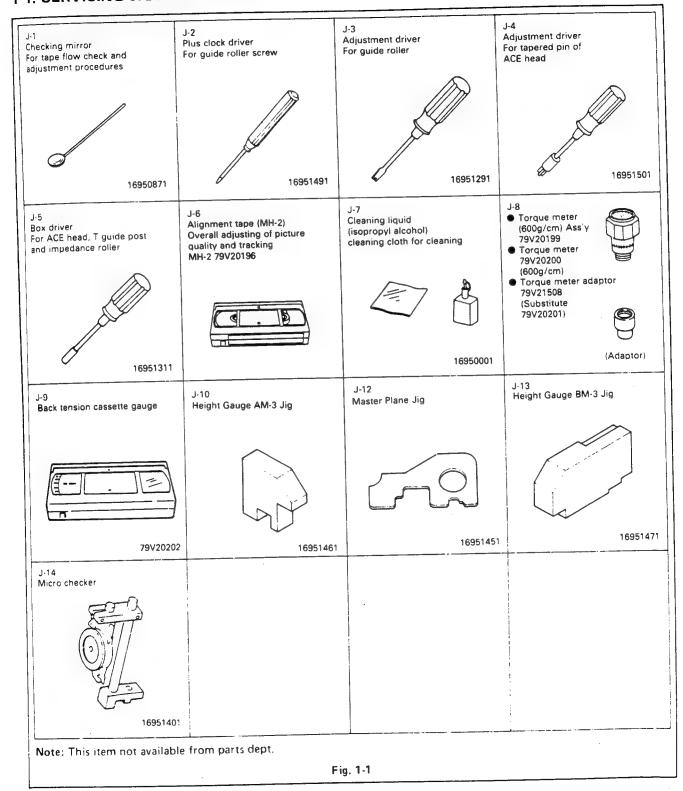
- (1) Remove the bottom cover. (Refer to Item 1-2.)
- (2) Disconnect flat cable (1).
- (3) Disconnect connector (2).
- (4) Disconnect bridge connector (3).
- (5) Release tabs (4) and lift the circuit board a little to remove.



SECTION 3 ADJUSTMENT

1. MECHANICAL ADJUSTMENT

1-1. SERVICING JIGS AND TOOLS

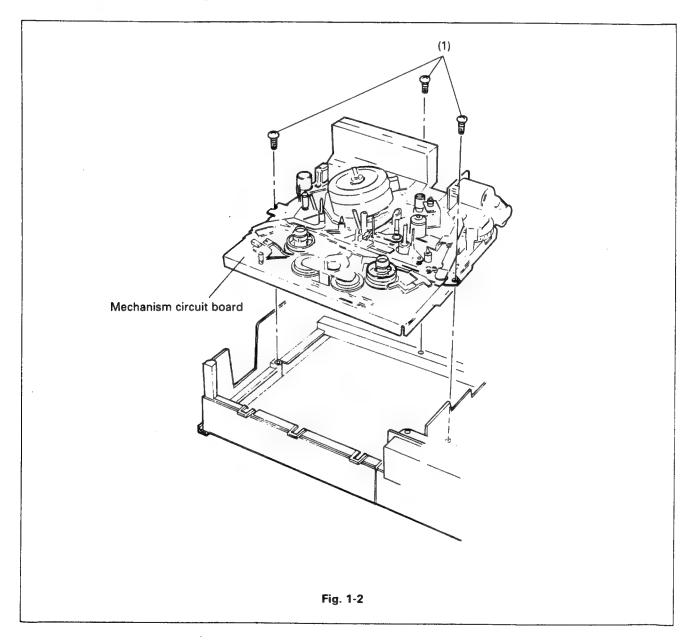


1-2. MECHANISM ASSEMBLY

1-2-1. Removing mechanism assembly (Figure 1-2)

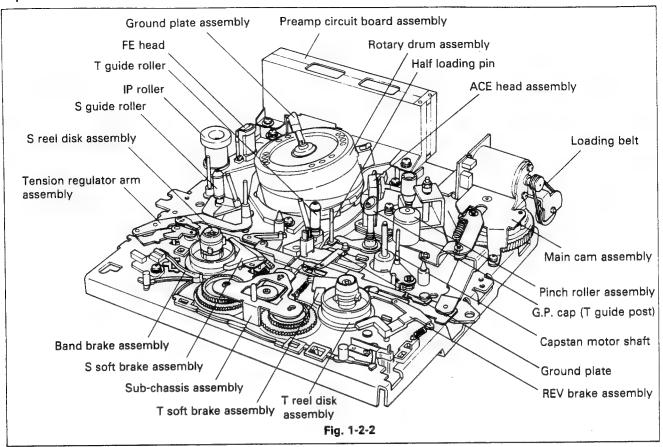
- (1) Remove the top cover, bottom plate, and front panel. (Refer to items 1-1, 1-2, and 1-3.)
- (2) Remove the cassette housing assembly. (Refer to item 4-1).
 - **Note:** When remounting the cassette housing, use the screws (red-painted) removed. Never use other screws.
- (3) Remove the preamplifier circuit board. (Refer to item 3-2).
- (4) Disconnect the wire connector and the drum heater from the rotary drum assembly.

- (5) Remove the wire lead with a ground lug.
- (6) Disconnect the connector from the ACE head.
- (7) Disconnect the connector from the FE head.
- (8) Disconnect the flat cable connected to the mechanism junction circuit board and the system control/servo/slow circuit board.
- (9) Remove three screws (1) securing the mechanism assembly.

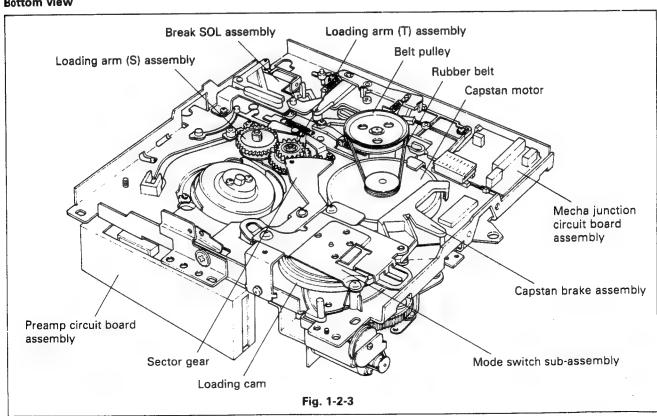


1-2-2 Mechanism parts locations (Fig. 1-2-2, 1-2-3)

Top view



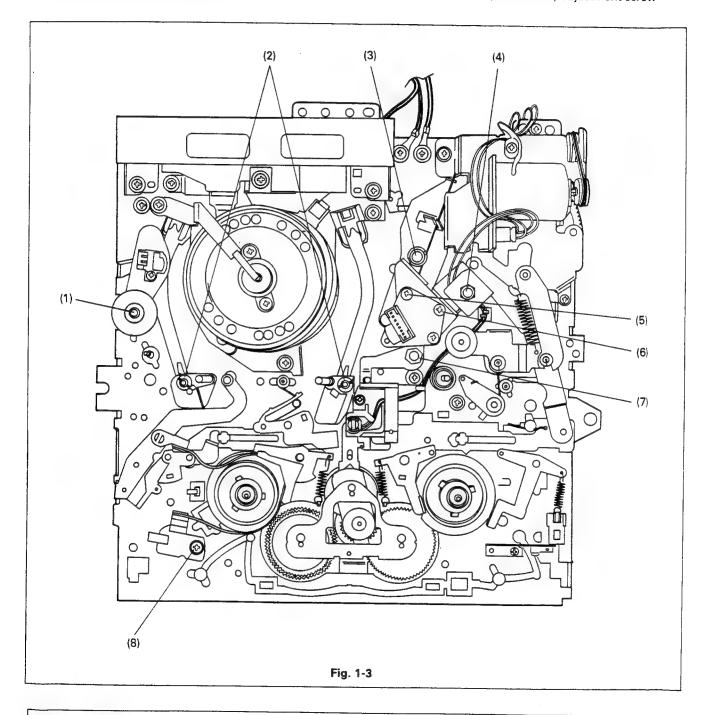
Bottom view



1-3 BEFORE DISASSEMBLING PARTS ON THE CHASSIS (Figure 1-3)

- Screws shown below need readjustment when they are once loosened or turned for part replacement. Do not tamper the screws.
 - 1) IP roller height adjustment nut
 - 2) T/S guide roller height adjustment screw
 - 3) ACE head X position adjustment nut (taper pin)
 - 4) ACE head height adjustment screw

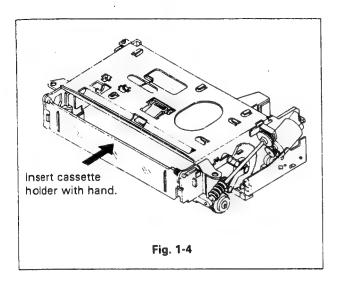
- 5) ACE head azimuth adjustment nut
- 6) ACE head tilt adjustment screw
- 7) T guide post height adjustment nut
- 8) Back tension (band brake) adjustment screw



Note: When a position adjustment nylon nut is removed with some part(s), always use the same nut when remounting the part(s).

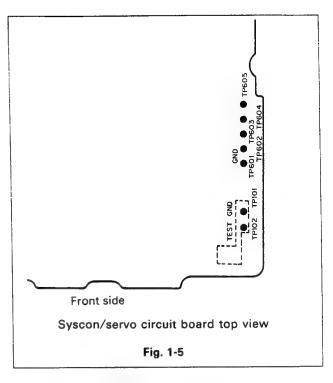
1-4. BEFORE ADJUSTING THE MECHAN-ISM (Figure 1-4)

- (1) This section describes adjustment procedures used when some mechanical parts are replaced because of their wearing or damage.
- (2) Since mechanism adjustments closely relate to electrical adjustments, also refer to the electrical adjustments when the mechanism adjustments have been performed.



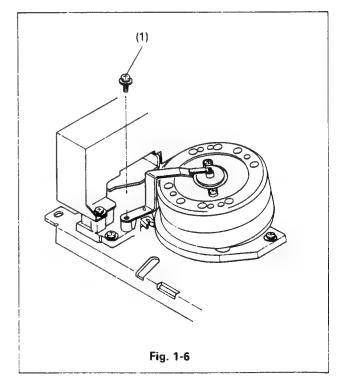
1-5. SERVICING PRECAUTIONS (Figure 1-5)

- (1) When servicing a VCR with the cover removed and the circuit board exposed, take care on holding (standing) direction of the VCR and the location to be placed on.
- (2) Also take care do not miss the screws removed. Prepare a box and place all screws removed into the box.
- (3) When testing or checking with the unit placed upright, take care not to fall over the unit.
- (4) When operating the unit with no cassette installed, connect TP101 and TP102 on the system controller/servo circuit board as shown in Figure 1-5, using a wire lead with alligator clips at its ends.
- (5) Normally, set the unit to the EJECT mode when replacing mechanisms.



1-6. REPLACEMENT OF GROUND PLATE ASSEMBLY (Figure 1-6)

- Remove screw (1) and remove the ground plate assembly.
- (2) When remounting the the assembly, position the assembly so that its contact touches the center of the drum assembly shaft and then tighten the screw (1).

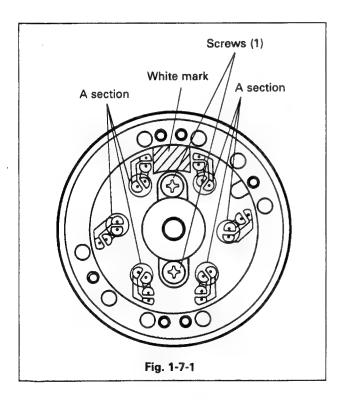


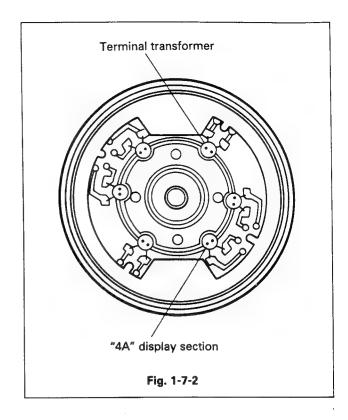
1-7. REPLACEMENT OF ROTARY DRUM ASSEMBLY (Figures 1-7-1, 1-7-2)

- (1) Remove the ground plate assembly, refer to item 1-6.
- (2) Desolder wire leads soldered at twelve locations marked A as shown in Figure 1-7-1.
- (3) Remove two screws (1) and then the drum assembly upward.
- (4) Clean the flange surfaces of the lower drum and the rotary drum assembly, using alcohol (isopropyl). Next, position the rotary drum assembly so that its white mark faces the mark "4A" on the rotary transformer as shown in Figure 1-7-2, and then make sure eight pins of the terminal transformer are matching to the holes of the circuit board provided on top of the rotary drum assembly. Then carefully slide down the rotary drum in place.

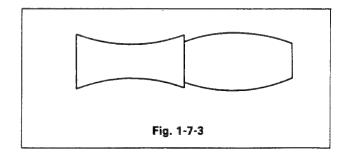
Note: 1) Do not touch the head tips with your hand or damage the head tips.

- If the drum assembly jams when it is sliding down, do not attempt to force the drum. Remove the drum, and try again in such a case.
- (5) Tighten two screws (1) alternately and securely solder the leads at twelve "A" sections.
- (6) Mount the ground plate assembly. (Refer to item 1-6)

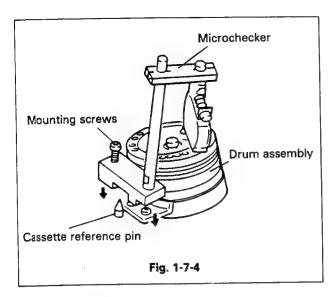




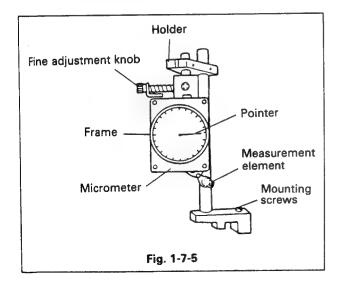
- (7) After the replacement, confirm following points:
 - 1) Rotary drum assembly eccentricity
 - ① Record a signal in the EP mode with the unit under test and playback the signal. Observe the envelope of the signal. If the envelope as shown in figure 1-7-3 is observed, the eccentricity adjustment should be made. (If the envelope is flat, no adjustment is required.)



- 2) Rotary drum assembly eccentricity adjustment
- ① Set the unit to the playback mode without a cassette. Turn off the power and remove the AC cord. (Refer to items 1-4, 1-5.)
- 2 Remove the cassette housing. (Figure 4-1)
- 3 Mount the microchecker with screws as shown in Figure 1-7-4.



- 3) Mounting and adjustment of the microchecker
- ① Carefully handle the microchecker as it is a precision instrument. (Figure 1-7-5)
- When mounting the microchecker, take care not to touch the drum assembly.
- 3 Before mounting the checker, loosen the fine adjustment knob by turning it counterclockwise.



- Confirm the microchecker is mounted correctly, refer to below:
 - a: The measurement Measuring element should be located 1-2mm away from upper edge of the tape contact surface of the rotary drum assembly.
 - b: The measurement Measuring element should be moved back and forth along central direction of the rotary drum.
- ⑤ Turn the fine adjustment screw clockwise until the Measuring element touches the rotary drum and the dial shows "0".
- Slowly rotate the rotary drum by one turn and observe reading of the dial pointer.
- The reading is less then 3µm no adjustment is necessary. If the reading is higher than 3um, turn the fine adjustment screw counterclockwise and remove the probe. Next, loosen the two rotary drum mounting screws (1) and adjust the drum position. Then tighten the drum securing screws alternately and repeat the steps 5 via 6 until a desired value is obtained.
- ® After completion of the adjustment, turn the fine adjustment screw counterclockwise and remove the measurement Measuring element first, then the microchecker.
- Mount the cassette housing again, and turn on the power.
- After the replacement, perform following checks and adjustments.
- ① ACE head position adjustment
- ② Playback switching adjustment
- The street is a serve of the sudio circuit
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1-8. REPLACEMENT OF DRUM ASSEM-BLY (Figure 1-8-1)

- (1) Remove the ground plate assembly. (Refer to item 1-6.)
- (2) Remove the preamplifier circuit board. (Refer to item 3-3.)
- (3) Disconnect the connector (1) and the drum heater (2) from the drum assembly.(When disconnecting the connector (1), hold the

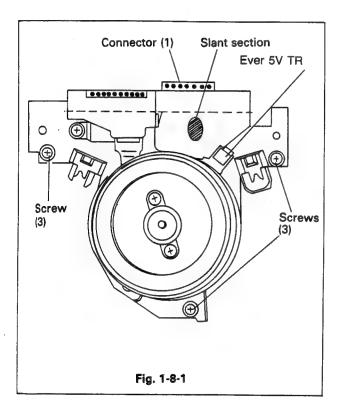
shaded area of the circuit board.)

Pomove three screws (2) and rome

(4) Remove three screws (3) and remove the drum assembly.

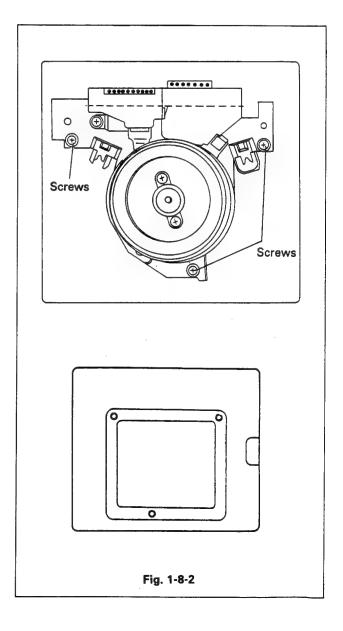
Note: When removing the drum assembly, do not touch or damage the head tips on the drum.

(5) When remounting the drum assembly, use the same procedure shown above in reverse order.



- (6) After the replacement, perform the following checks and adjustments:
 - Tape path adjustment (Refer to item "2 Tape path check and adjustment".)
 - Interchangeability adjustment (Refer to item "3 Interchangeability adjustment".)
 - Check or adjustments for entire servo, video, and audio circuit systems. For the adjustments, refer to items 4-2, 4-3, 4-4, and 4-7.)
- (7) Unpacking drum service part (Figure 1-8-2) When taking out a spare drum assembly from the package, remove three black screws first, and then remove the partition board, and then the drum.

Note: Carefully handle the drum to prevent it from dropping, deformation, scratch, dirty, etc.

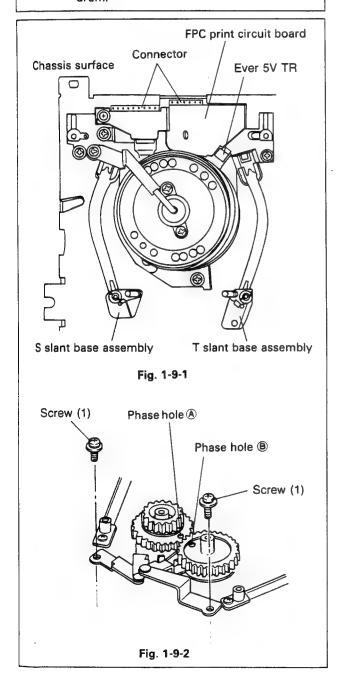


1-9. REPLACEMENT OF S-SLANT BASE ASSEMBLY AND T-SLANT BASE ASSEMBLY (Figure 1-9)

- (1) Place the unit up side down.
- (2) Remove screw (1).
- (3) When remounting use the same procedures shown above in reverse order.
- (4) When reassembling, phase holes (A) and (B) should be coincided.

Note: 1. When remounting use the same screws just removed, do not use other screws.

2. When removing, do not touch the rotary drum.



1-10. REPLACEMENT OF IP ROLLER (Figure 1-10)

(1) Remove the nylon nut and remove the poly-slider, IP roller, IP roller, and IP flange.

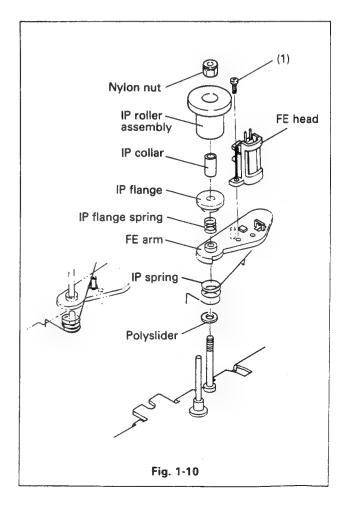
Note: When removing the nylon nut, hold the FE arm with hand so that nothing touches the rotary drum.

- (2) Remove the FE arm and the IP spring.
- (3) When reassembling, first hook one (longer) end of the IP spring on the lower tab of the FE arm base and use the same procedures shown above in reverse order.

1-11. REPLACEMENT OF FE HEAD (Figure 1-10)

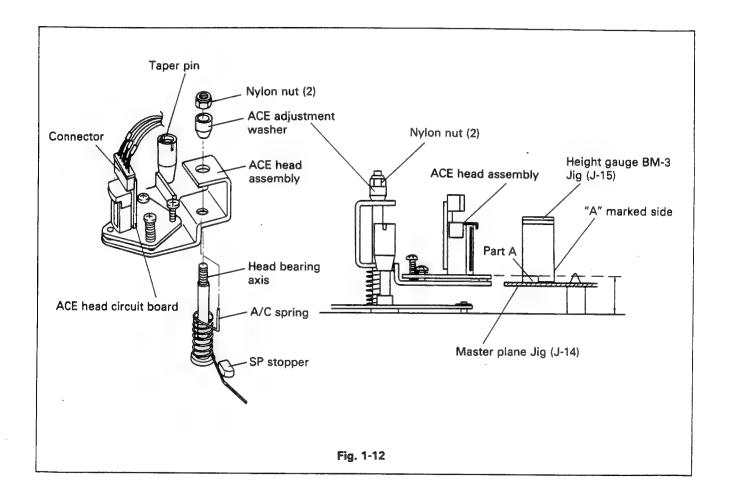
- (1) Disconnect the connector from the FE head.
- (2) Remove the screw (1) securing the FE head and remove the FE head.
- (3) When remounting the FE head, use the same procedures shown above in reverse order.

Note: After completion of the FE head replacement, apply screw lock.



1-12. REPLACEMENT OF AUDIO/CON-TROL HEAD (Figure 1-12)

- (1) Disconnect the connector from the ACE circuit board.
- (2) Remove the nylon nut (2), using a box driver (J-5).
- (3) Turn the ACE head counterclockwise to separate it slightly from the taper pin, and then slide it upward to remove it from the head shaft. In this case, take care the head assembly is loaded by the A/C spring.
- (4) When reassembling the ACE head, use the same procedures shown above in reverse order.
- (5) After completion of the replacement, perform the ACE head height adjustment.
- (6) Place the master plane Jig (J-14) on the chassis. Place the height gauge BM-3 (J-15) with the mark "A" faced down on the master plane, and adjust the nylon nut (2) with the box driver (J-5) until the ACE headbase height reaches the same level as that of the "A" part.



Note: After completion of the ACE head replacement, perform the ACE head height and azimuth adjustments described under item 3-4 and the CTL position adjustment shown in item 3-5.

1-13. REPLACEMENT OF SECTOR GEAR (Figure 1-13)

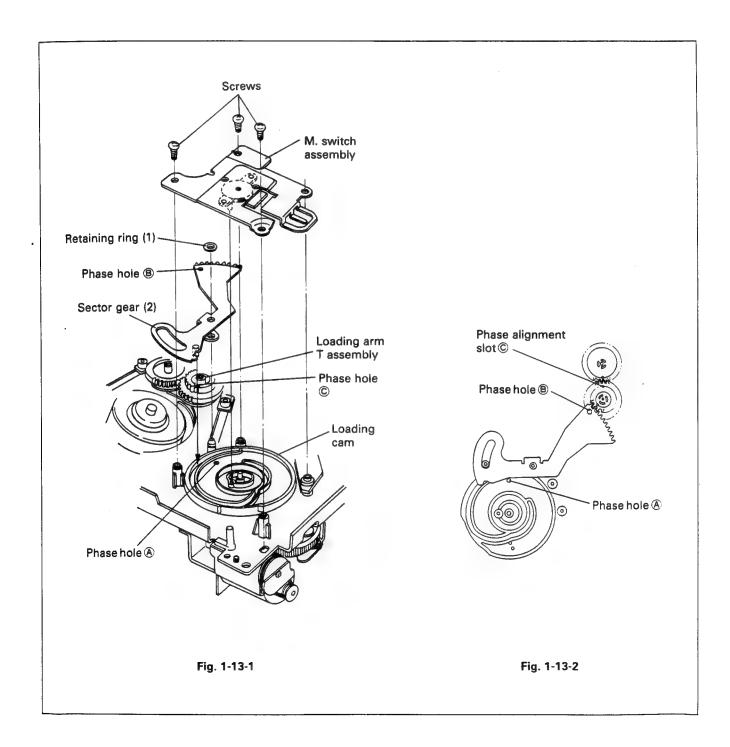
* Before replacing the gear, always make sure the unit is in the EJECT mode.

[To remove]

- (1) Remove the M switch assembly. (Refer to item 4-3.)
- (2) Remove the retaining ring (1) and slide the sector gear upward.

[To reassemble]

- (1) First, make sure the loading cam is mounted in the correct position. (Refer to item 1-14.)
- (2) Position the sector gear so that its phase hole ® aligns with the position adjustment slot © on the loading arm T assembly as shown in Figure 1-13-2.
- (3) Mount the retaining ring (1).
- (4) Mount the M switch assembly. (Refer to item 4-3.)



1-14. REPLACEMENT OF LOADING CAM (Figure 1-14)

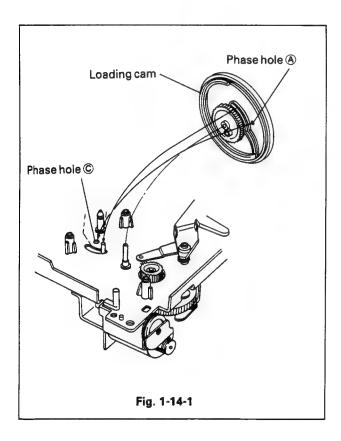
* Before replacing the cam, always make sure the unit is in the EJECT mode.

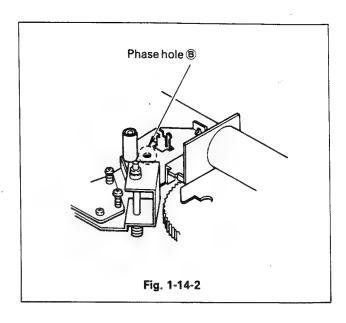
[To remove]

- (1) Remove the M switch assembly. (Refer to item 4-3.)
- (2) Remove the sector gear. (Refer to item 1-13.)
- (3) Remove the loading cam.

[To reassemble]

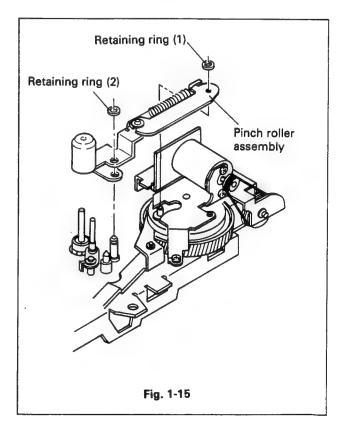
- (1) When reassembling the loading cam first, make sure the phase hole ® of the link (M) assembly and the phase hole © of the mechanism chassis are coincided.
- (2) When remounting the loading cam, mount the cam so that the phase hole (a) of the loading cam aligns with the phase hole (b) of the mechanism chassis. In this case, take care the boss of the link (M) assembly fits into the slot of the loading cam precisely and the phase hole (b) of the link (M) assembly aligns with the phase hole (c) of the mechanism chassis.
- (3) Mount the sector gear. (Refer to item 1-13.)
- (4) Mount the M switch assembly. (Refer to item 4-3.)





1-15. REPLACEMENT OF PINCH ROLLER ASSEMBLY (Figure 1-15)

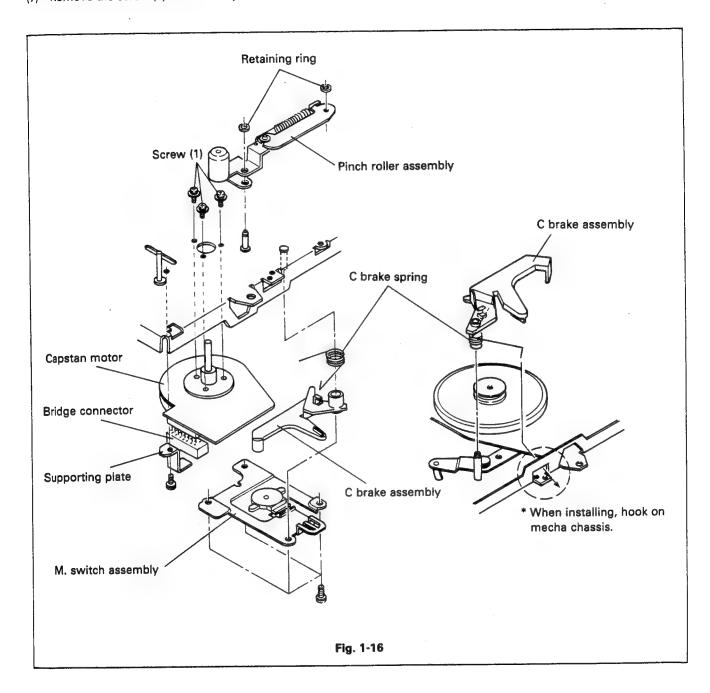
- (1) Remove the retaining ring (1).
- (2) Remove the retaining ring (2).
- (3) Remove the pinch roller assembly by sliding it upward.
- (4) When mounting a new one, use the same procedures shown above in reverse order.



1-16. REPLACEMENT OF CAPSTAN MOTOR (Figure 1-16)

- (1) Remove the belt.
- (2) Remove the bridge connector.
- (3) Remove the supporting plate.
- (4) Remove the M switch assembly. (Refer to item 4-3.)
- (5) Remove the C brake assembly.
- (6) Remove the pinch roller assembly. (Refer to item 1-15.)
- (7) Remove the screw (1) and then capstan motor.

Note: When replacing the capstan motor, take care not to damage the capstan shaft and magnetize the



1-17. REPLACEMENT OF MAIN CAM ASSEMBLY (Figure 1-17)

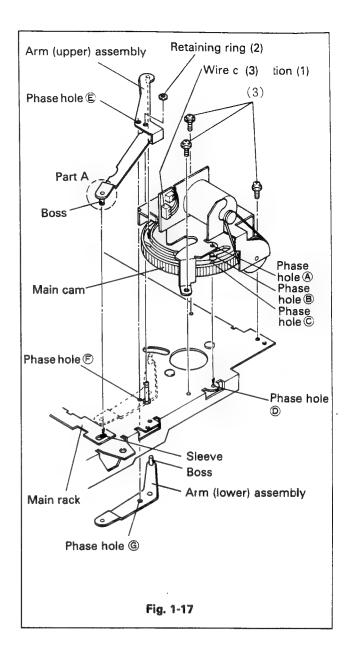
* Before replacement, always make sure the unit is in the EJECT mode.

[To remove]

- (1) Make sure the phase holes (a), (b), (c), and (d) are aligned in line through the pulley of the main cam assembly. (This condition is the same as that of the EJECT mode.)
- (2) Remove the pinch roller assembly. (Refer to item 1-15.)
- (3) Remove the wire connector (1).
- (4) Remove the retaining ring (2) and then the upper arm assembly.
- (5) Remove the screw (3) and remove the main cam assembly upward.

[To reassemble]

- (1) Align the phase hole © of the lower arm assembly and the phase hole © on the mechanism chassis in a line.
- (2) When mounting the main cam assembly, make sure the main cam phase holes (a), (b), (c) and the phase hole (d) on the mechanism chassis are aligned in a line, and then mount the assembly with screw (3). The boss of the lower arm assembly fits precisely into the slot on the main cam.
- (4) Mount the pinch roller assembly. (Refer to 1-15.)
- (5) Mount the wire connector (1).



1-18. REPLACEMENT OF SOL LINK LEVER (Figure 1-18-1)

[To remove]

 Slide the SOL link lever upward and remove the lever, taking care not to miss the absorbing strap of the brake SOL assembly.

[To assemble]

(1) Insert the plunger boss of the brake SOL assembly into the hole on the SOL link lever to mount the plunger precisely onto the SOL link lever slot. Make sure motion of the absorbing strap is smooth.

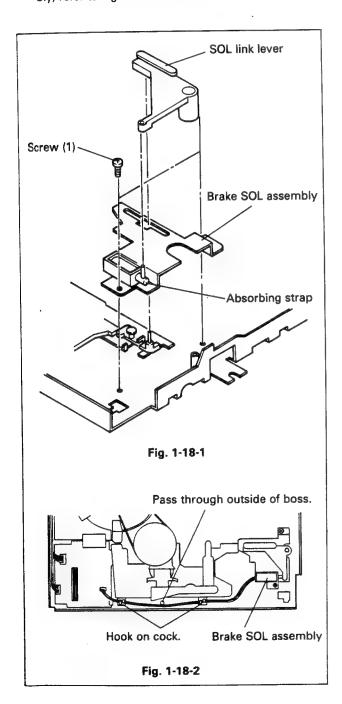
1-19. REPLACEMENT OF BRAKE SOL ASSEMBLY (Figure 1-18)

[To remove]

- (1) Remove the SOL link lever. (Refer to Figure 1-18.)
- (2) Remove the screw (1), disconnect the wire connector of the mechanism junction, and remove the brake SOL assembly.

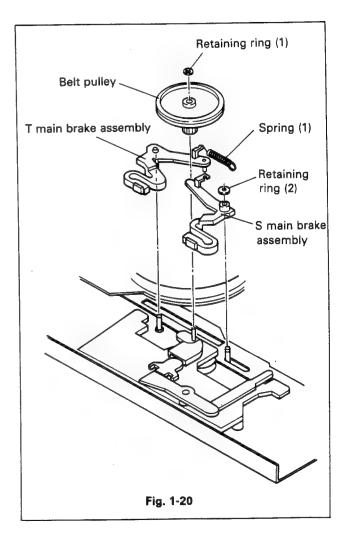
[To reassemble]

- (1) Mount the brake SOL assembly accurately with the screw (1) in the place it was mounted.
- (2) Remove the SOL link lever. (Refer to item 1-18.)
- (3) For routing of the wire leads of the brake SOL assembly, refer to Figure 1-18-2.



1-20. REPLACEMENT OF T MAIN BRAKE ASSEMBLY AND S MAIN BRAKE AS-SEMBLY (Figure 1-20)

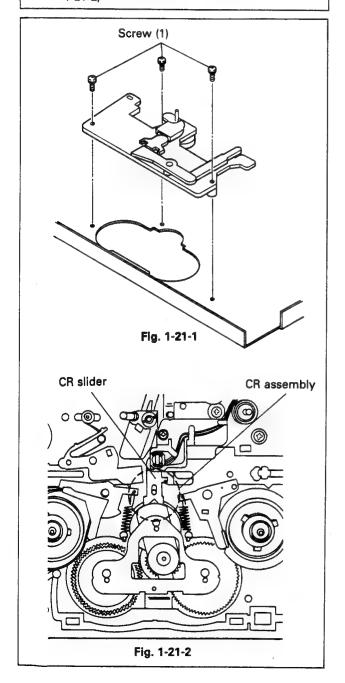
- (1) Remove the retaining ring (1) and the belt pulley.
- (2) Remove the spring (1).
- (3) Remove the T main brake assembly upward.
- (4) Remove the retaining ring (2) and remove the S main brake assembly upward.
- (5) When reassemble the T main brake assembly and the S main brake assembly, use the same procedures shown above in reverse order.



1-21. REPLACEMENT OF SUB-CHASSIS ASSEMBLY (Figure 1-21)

- (1) Place the mechanism chassis up side down.
- (2) Remove the rubber belt.
- (3) Remove the belt pulley. (Refer to 1-20.)
- (4) Remove the T main brake assembly and the S main brake assembly. (Refer to item 1-20.)
- (5) Remove the screw (1) and remove the subchassis assembly.
- (6) When reassembling the sub chassis, use the same procedures shown above in reverse order.

Note: When reassembling, make sure the CR slider is properly engaged with the CR assembly. (Figure 1-21-2)

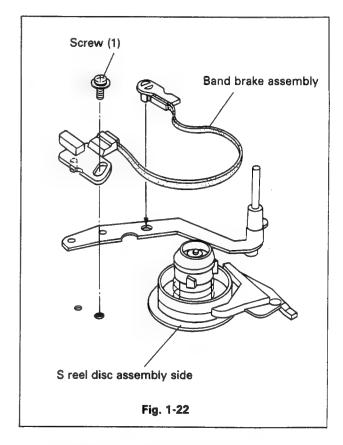


1-22. REPLACEMENT OF TENSION REGU-LATION BAND ASSEMBLY (Figure 1-22)

- (1) Remove screw (1).
- (2) Remove the band brake assembly from the tension regulation gear arm assembly.
- (3) When reassembling the band brake assembly, use the same procedures shown above in reverse order.

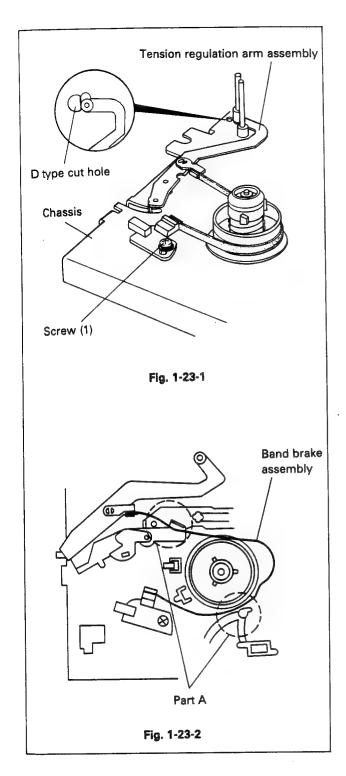
Note: When replacing the tension regulation band, do not apply excessive force to the band. If applied, the band will be deformed.

Thread the band brake assembly as shown in Figure 1-23-2. Always perform the tension regulation arm position adjustment described under item 1-23.



1-23. TENSION REGURATION ARM POSI-TION ADJUSTMENT (Figure 1-23)

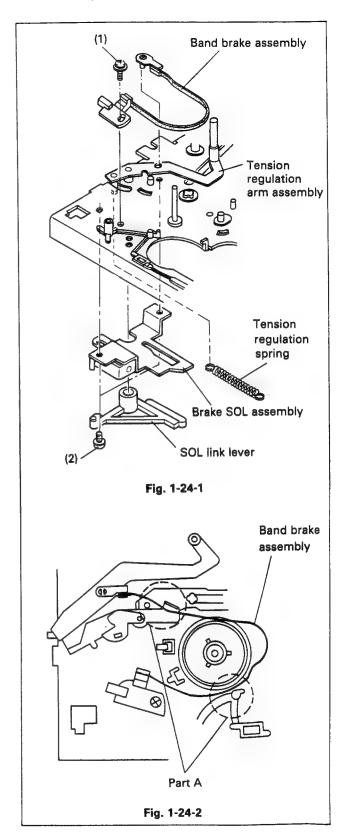
- (1) Set the unit to the PLAY mode with a cassette unloaded.
- (2) Mount and fix the tension reguration arm assembly with screw (1) so that its end just overlaps D-form cutout provided on the chassis as shown in Figure 1-23-1.
- (3) Make sure the band brake assembly is threaded as shown in Figure 1-23-2. Particularly paying attention to the part "A".



1-24. REPLACEMENT OF TENSION REGU-LATION ARM ASSEMBLY (Figure 1-24)

- (1) Remove screw (1), and remove the band brake assembly from the tension regulation gear assembly.
- (2) Remove the SOL link lever. (Refer to item 1-18.)
- (3) Remove the brake SOL assembly. (Refer to item 1-19.)

- (4) Remove the tension regulation spring.
- (5) Remove the tension regulation arm assembly.
- (6) When mounting the tension gear arm assembly, use the same procedures shown above in reverse order.



1-25. REPLACEMENT OF S REEL TABLE ASSEMBLY (Figure 1-25)

- (1) Remove the S soft brake assembly from the hook (1) and then remove it upward.
- (2) Remove the tension regulation band assembly.
- (3) Remove retaining ring (2) and remove the S reel table assembly.
- (4) When mounting a new S reel table assembly, use the same procedures shown above in reverse order.

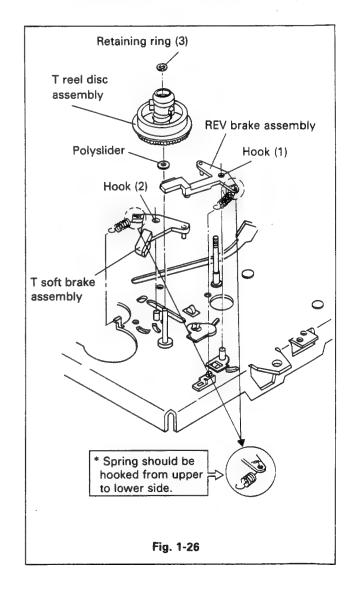
Note: A polyslider of 0.13 theckness is used to adjust reel table height, so in certain units no polyslider will be used.

S reel disc assembly side S soft brake assembly Hook (1) *Spring should be hooked from upper to lower side. Fig. 1-25

1-26. REPLACEMENT OF T REEL TABLE ASSEMBLY (Figure 1-26)

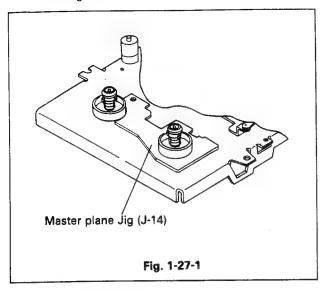
- (1) Remove the REV brake assembly from the hook (1) and then remove it upward.
- (2) Remove the T soft brake assembly from the hook (2) and then remove it upward.
- (3) Remove the stop ring (3) and then the T reel table assembly.
- (4) When mounting a new T reel table assembly, use the same procedures show above in reverse order.

Note: The polyslider of 0.13 theckness is used to adjust reel table height, so no polyslider will be used in certain units.



1-27. S AND T REEL TABLE ASSEMBLY AD-JUSTMENTS (Figure 1-27)

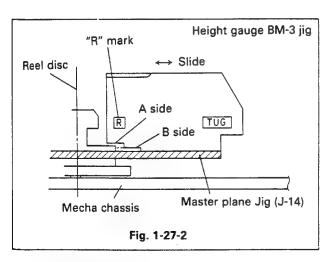
(1) Place the master plane Jig (J-14) on the deck as shown in (Figure 1-27-1) to check or to adjust the S and T reel table height.



(2) Place the height gauge BM-3 jig (J-15) on the master plane jig and slide it in the directions shown by arrows in Figure 1-27-1 to make sure the upper plane of the reel table assembly passes under the "A" plane of the jig and does not pass under the "B" plane.

Note: When performing S reel table height check, place the height gauge Jig BM-3 (J-15) in the master plane Jig (J-14) so that its mark "R" faces as illustrated in Figure 1-27-2.

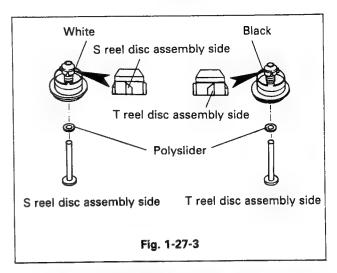
When performing T reel table height check, place the height gauge in the same way.



(3) If the reel table height is outside the limit, adjust the height by replacing the polyslider with a new one having different thickness. (Figure 1-27-3)

Part number for adjustment polysliders:

016-62-8731 : 0.5mm thickness 016-28-8001 : 0.13mm thickness



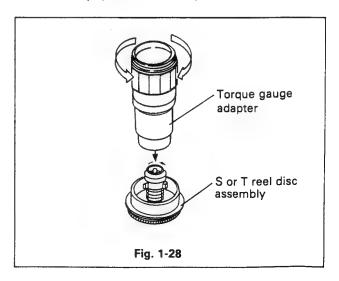
1-28. MEASUREMENT AND CONFIRMA-TION OF FWD WINDING TORQUE (Figure 1-28)

- (1) Set the unit to the FWD mode.
- (2) Place a torque gauge on the T reel table assembly and measure the torque (J-10, J-11).
- (3) FWD torque specification: 85 ± 20 g.cm
- (4) FF, REW torque specification: Higher than 400g.cm
- (5) REV torque specification: 180 ± 30g.cm

1-29. MEASUREMENT AND CONFIRMA-TION OF BRAKE TORQUE (Figures 1-28, 1-29)

When S and T main brake assemblies are replaced, perform following measurements:

(1) Remove the cassette housing and connect TP101 and TP102 on the system control/servo/tuner circuit board with a clip. (Refer to item 1-5).



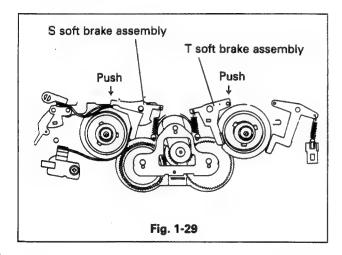
- (2) Set the unit to the STOP mode and unplug the AC cord.
- (3) S main brake torque measurement

Push the S soft brake slightly in direction shown by the arrow until the band brake is released from the reel table.

Place the torque gauge on the S reel table assembly. Hold the gauge lightly, turn it clockwise until the dial scale just moves with the dial pointer. Read the torque at this condition, it should be higher than 70g.cm.

(4) T main brake torque measurement

In the same way push the T soft brake slightly in the direction shown by the arrow. Place the torque gauge on the T reel table assembly. Turn the gauge counterclockwise until the dial scale just moves with the pointer. Read the torque at that condition, it should be higher than 70g.cm.



Note: If the measurement value deviates excessively from the limit values, check springs, etc.

2. CHECKING AND ADJUSTING TAPE PATH

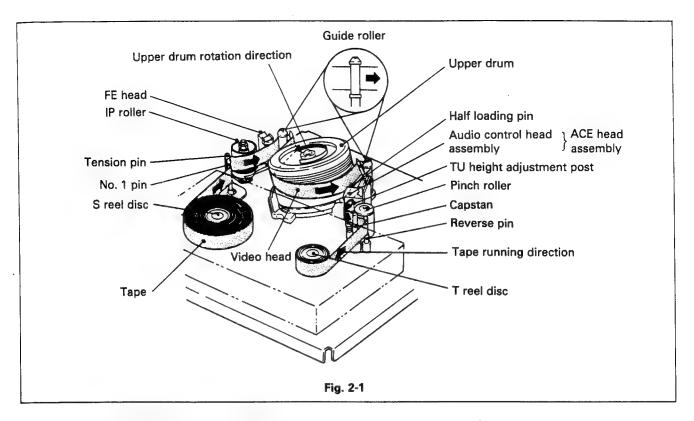
The tape path mechanism has been completely adjusted, so no additional adjustment is necessary, except some parts associated with the tape path mechanism have been replaced or worn out for long period of use.

Tape is wound inside a cassette in passing through pin No.1, tension pin, IP roller, and routine shown by arrows in Fig. 2-1. The IP roller functions to absorb fine vibration being caused along running direction of the tape and prevents jitter of picture and wow and flutter for audio signals.

The reverse pin works to limit height of the tape before it outputs from the T reel table and enters the capstan (pinch roller) in the REV mode where the tape runs in reverse direction.

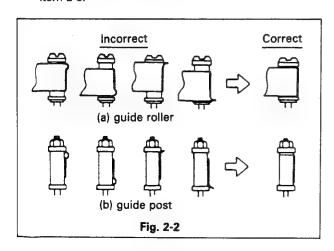
2-1. TAPE PATH MECHANISM (Figure 2-1)

In the VHF tape path system, an upper drum with video heads rotates and tape is wrapped around a slanted drum in "M" form. To wrap the tape around the drum slanted, a pair of slant posts provided at left and right sides of the drum limits running status of the tape. Moreover, a pair of guide rollers limits running height of the tape.



2-2. TAPE RUNNING PATH CHECK

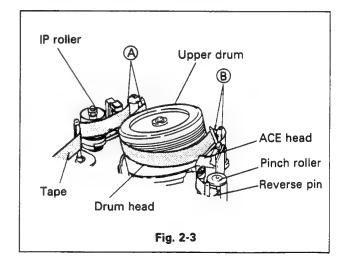
- (1) A cassette tape (T-120) is used.
- (2) Clean surfaces of tape transport mechanism (tape guide, tape running surface of the drum, capstan shaft, pinch roller, ACE, FE heads, etc.) with a cleaning cloth soaked in cleaning solution (isopropyl alcohol).
- (3) Load a cassette tape into the unit to check following points.
- (4) Repeat the PLAY and the STOP mode of operations several times and make sure the unit works as expected without any abnormality.
- (5) Operate the unit in the PLAY, CUE, and REV mode and observe running status of the tape at the S guide roller, S guide post, T guide roller, T guide post, reverse pin whether the tape runs smoothly without wrinkling. (Figure 2-2) If tape wrinkling is found, adjust as shown in item 2-3.



- (6) Also make sure there is no waving of the tape when it runs at the parts

 and

 in each mode of PLAY, CUE and REV.
- (7) Repeat the REV and the CUE mode alternately in several times and make sure that the tape does not move up and down at the ACE head.



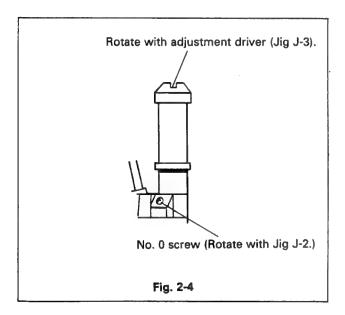
2-3. TAPE TRANSPORT SYSTEM ADJUSTMENT

Perform the tape transport system adjustment only when abnormality is found when the tape is running in Figure 2-2.

Note: If the tape transport system adjustment has been made, always perform the interchangeability adjustment.

2-3-1. Guide roller height adjustment (Vertical pole height adjustment)

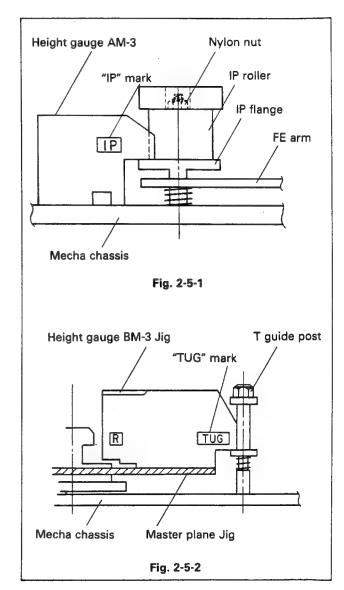
- Loosen No. 0 screws provided at each base of the S guide roller and the T guide roller until the guide roller can be rotated easily with the adjustment driver.
- (2) Load a cassette tape and set the unit to the PLAY mode.
- (3) Turn the supply guide roller with the adjustment driver (J-3) until the tape wrinkling disappears at upper and lower flanges of the roller.
- (4) In the same way adjust the T guide roller.



2-3-2. Guide post height adjustment

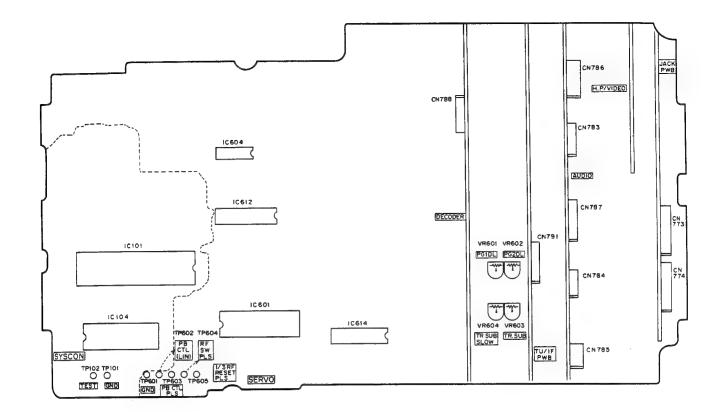
Note: When performing the T guide post height adjustment, remove the G.P. cap.

- [A] IP roller and T guide post height adjustment
- (1) Place the height gauge AM-3 Jig (J-13) on the chassis as shown in Figure 2-5-1, and adjust lower plane height of the IP flange by turning the nylon nut.
- (2) When adjusting height of the T guide post, place the master plane Jig (J-14) on the chassis, and the height gauge BM-3 Jig (J-15) on the plane Jig as shown in Figure 2-5-2 (The TUG mark should be faced at right.) Adjust the upper plane height of the lower flange with the nylon nut.

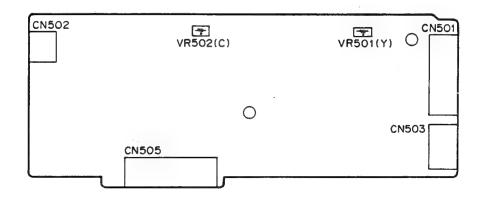


3. INTERCOMPATIBILITY ADJUSTMENTS

Because these adjustments have a significant effect on the picture quality in the respective modes, as well as affecting the degree of tape intercompatibility, be sure to perform the following procedures very carefully and thoroughly.



SERVO * This circuit board is viewed from component side.

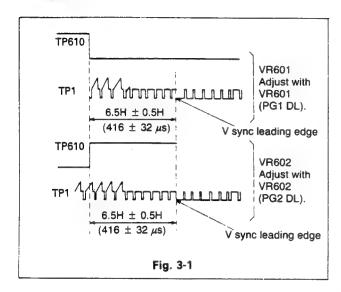


PREAMP • This circuit board is viewed from component side.

3-1. FM WAVEFORM CHECK

3-1-1. Check 1 (Playback switching point)

- (1) Play back the alignment tape (MH-2).
- (2) Connect oscilloscope's CH1 to test pin TP610 on the S/S circuit board.
 - Connect oscilloscope's CH2 to test pin TP901 on the jack terminal circuit board.
- (3) Make sure time interval of 6.5H ± 0.5H is obtained between the V sync front porch and RF switching pulse.
- (4) If the time interval is not 6.5H \pm 0.5H, adjust V601 and V602 on the S/S circuit board to obtain the specified value.



3-1-2. Check 2 (FM waveform check)

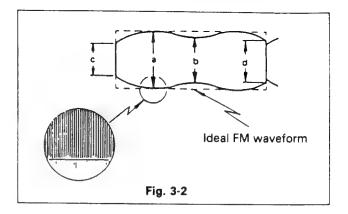
- (1) Connect the oscilloscope's CH1 to TP501 on the preamplifier circuit board. Also connect the scope's trigger terminal to TP604 on the S/S circuit board or TP901 on the jack terminal board.
- (2) Play back the alignment tape (MH-2).
- (3) Adjust the tracking control until maximum FM waveform is obtained.
- (4) Read the maximum value "a" in Figure 3-2. If the waveform is of sawtooth, read the amplitude at the most flat part of the waveform.
- (5) Read the minimum value "b" (except values corresponding to the drum entrance and exit).

(6) In the same way, read the value "c" corresponding to drum entrance and the value "d" corresponding to the drum exit.

Make sure each value of the a, b, c, d are within the specified value.

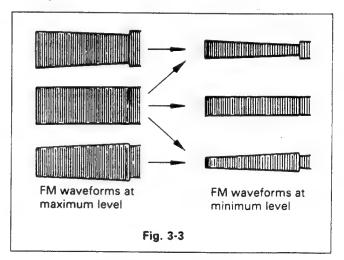
Note: 1. Read minimum values of b, c, and d.

- 2. If the values are within the specified limits, proceed to next check 3-1-3.
- 3. If abnormality is found, perform the FM waveform adjustment under item 3-2.

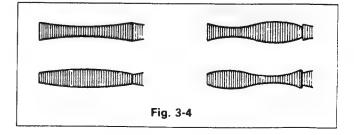


3-1-3. Check 3

(1) Connect the oscilloscope as in the "Check 2". Observe the scope display while turning the tracking control knob. If the waveform on the scope display varies linearly as shown in Figure 3-3 as the tracking control is varied, proceed to "3-4 ACE head height and azimuth adjustments".



(2) If the scope display shows waveform as shown in Figure 3-4, fine adjustment given in item 3-3 should be made.

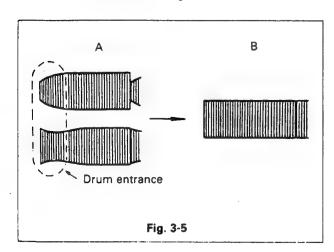


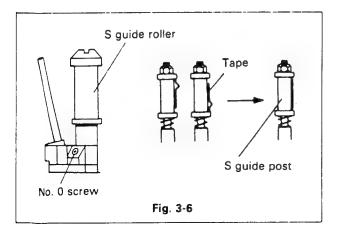
3-2. FM WAVEFORM COARSE ADJUST-

- (1) Loosen No. 0 screws at the base of the supply and takeup guide rollers with a (+) screw driver until the guide rollers can rotate for the adjustment.
- (2) Connect the oscilloscope's CH1 to TP501 on the preamplifier circuit board and the scope's CH2 to TP602 on the S/S circuit board or TP901 on the jack terminal board (the signal is used as an external trigger signal.)
- (3) Play back the alignment tape (MH-2).

3-2-1. Drum entrance side

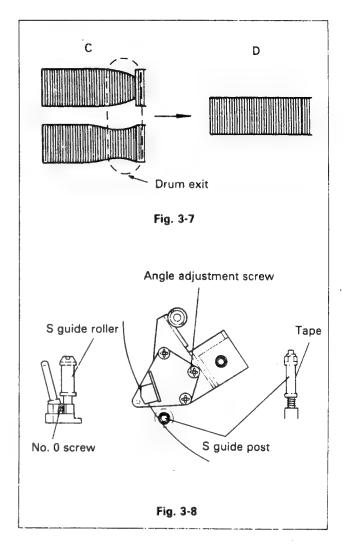
- Adjust the tracking control until maximum amplitude of the FM waveform is obtained while turning the tracking control knob.
- (2) If the waveforms as shown in Figure 3-5 (A) are observed, adjust the supply guide roller to obtain the flat waveform as shown in B.
- Note: 1. If the guide roller rotate freely, slightly tighten the No.0 screw to the degree which allows adjustment by the Jig J-3). (Refer to Figure 3-6.)
 - 2. Adjust the guide roller little by little to prevent the alignment tape (MH-2) from damage.
 - Moreover, make sure tape wrinkling does not occur at the guide poles and the leading edge of the drum while observing the waveforms.





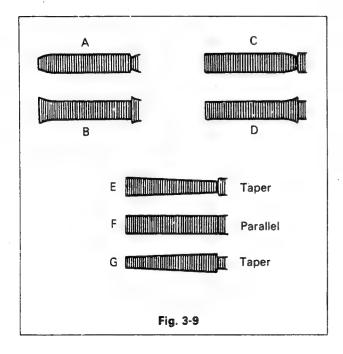
3-2-2 Drum exit side

(1) In the same way as conducted in the "Drum entrance side", adjust the waveform by turning the take-up guide roller. If waveforms as shown in Figure 3-7 are obtained, adjust the take-up guide roller until the flat response is obtained as shown in D.



3-3. FINE ADJUSTMENT FOR INTER-CHANGEABILITY

- (1) Connect the oscilloscope to the test pin TP501 on the preamplifier circuit board. Connect the oscilloscope's external trigger terminal to TP604 on the S/S circuit board
 - the alignment tape (MH-2). Adjust the tracking control knob for minimum FM output level while observing the the scope display.
- (2) If the scope display shows waveforms shown in Figure 3-9, C and D, minimize the FM waveform and carefully adjust T and S guide rollers until a waveform shown in Figure 3-9 E, F, or G is obtained.

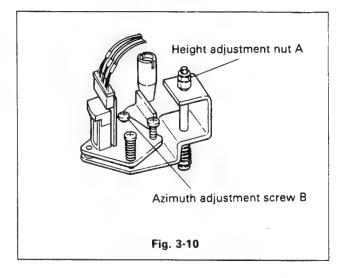


(5) After completion of the adjustments above, make sure the tape transport mechanism works correctly, and then carefully tighten the No.0 screws.

3-4. ACE HEAD HEIGHT AND AZIMUTH ADJUSTMENT

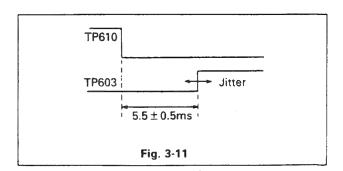
Improper height adjustment of the audio and control heads lowers SN, when a recorded tape is reproduced. (Refer to Figure 3-10.)

- (1) Connect the oscilloscope's CH1 to the Audio output terminals on the rear panel.
- Play back a 7kHz audio signal recorded in the alignment tape (MH-2).
- (3) Observe the audio signal waveform on the scope display and adjust the azimuth adjusting screw B for maximum output level.
- (4) Adjust the height adjusting screw A as shown in Figure 3-10 for maximum output level.



3-5. CTL POSITION ADJUSTMENT

- [A] Sub-tracking adjustment
- (1) Connect the oscilloscope's CH1 to the test pin TP610 on the S/S circuit board and the CH2 to the test pin TP603 on the same circuit board.
- (2) Run the alignment tape (MH-2).
- (3) Adjust VR603 until rising edge of V sync pulse matches to rising edge of the RF switching pulse as shown in Figure 3-11.

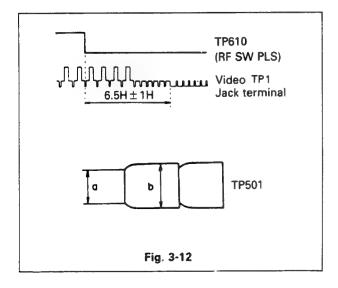


- [B] ACE head position adjustment
- (1) Connect the oscilloscope's CH1 to the test pin TP501 on the preamplifier circuit board and the CH2 to the test pin TP610 on the S/S circuit board.
- (2) Play back the alignment tape (MH-2) and adjust the taper pin until maximum amplitude of the FM waveform is obtained with the tracking control set at its center position. (Refer to Figure 3-10.) Next, play back the alignment tape (MH-2) and make sure the FM waveform shows maximum amplitude at the center of the tracking control knob.

3-6. FINAL CHECK

- (1) Connect the oscilloscope's CH1 to the test pin TP610 on the S/S circuit board and the CH2 to the test pin TP1 on the jack terminal board.
- (2) Make sure REC timing is set at $6.5H \pm 1H$. (Figure 3-12)
- (3) Record a monochrome signal or a stair step signal on a blank tape.
- (4) Connect the oscilloscope's CH1 to the test pin TP501 on the preamplifier and the CH2 to TP610. Play back the tape just recorded and make sure eveness (a/b) of the waveform is higher than 0.7. (Figure 3-12)
- (5) After completion of the checks and adjustments shown above, make sure the tape is being transported normally.

Apply screw lock paint on the azimuth adjusting screw and the taper pin.



4. ELECTRICAL ADJUSTMENTS

4-1. PREPARATION

The electrical adjustments should be made when some mechanical parts such as the video heads, etc. are replaced because of damage or worn out. When electrical failure occurs, always locate cause of the trouble using measurement equipments, then proceed to repairing works and adjustments.

4-1-1. Measurement equipment and Jigs

- ① Color TV monitor (color TV)
- ② Oscilloscope
- ③ Color bar generator
- Frequency counter

- 5 Audio signal generator
- ① Alignment tape (MH-2), and other general tools
- ① Cassette tape (E-60, E-120)
- (8) Digital multimeter or circuit tester

4-1-2. Alignment tape contents

● MH-2

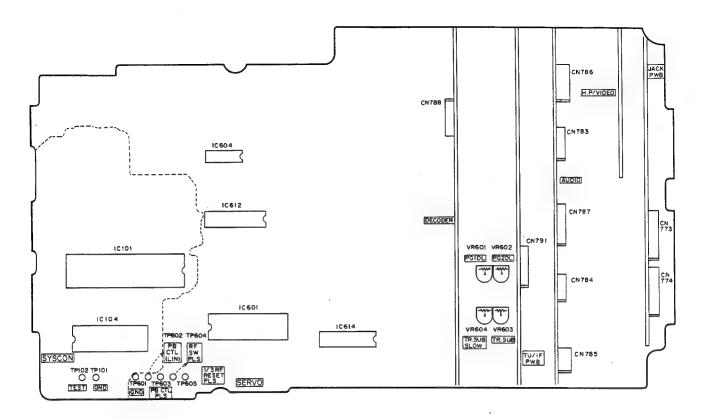
No.	Playback Time	Video Signal	Audio Signal	Applications
1	10 minutes	Stair-step	6 kHz	 Interchangeability checks and adjustments Drum servo circuit checks and adjustments Audio head azimuth adjustment
2	5 minutes	(none)	3 kHz	Tape speed check Wow and flutter check
3	10 minutes	Color bar	1 kHz	 Video signal playback circuit checks and adjustments Audio signal playback circuit checks and adjustments
4	3 minutes	RF sweep	(none)	 Video head resonance (Q) adjustments Marker: 2MHz, 4MHz, 5MHz (not used)

Table 4-1 MH-2 contents

4-2. SERVO CIRCUIT (S/S board)

No.	Item	Check- point	Adjustment Parts	Signal & Mode	Adjustment & Confirmation
1	Video switching point	TP610 (RF SW PLS) TP1 [on jack terminal] (VIDEO OUTPUT)	VR601 (PG1 DL) VR602 (PG2 DL)	MH-2 P.B.	 Connect an oscilloscope to TP610 and TP1. Play back the alignment tape specified at left, watch the monitor screen, and adjust the tracking VR to the best tracking condition. Adjust VR601 and VR602 so that the phase relationship of RF SW PLS with the reproduced video signals will be as shown below. TP1 VR601 Adjust with VR601 (Adjust with VR601 (Adjust with VR601 (PG1 DL). V sync leading edge TP610
And the second s					VR602 Adjust with VR602 (PG2 DL). 6.5H ± 0.5H (416 ± 32 μs) V sync leading edge
2	Tracking SUB VR	TP610 (RF SW PLS) TP603 (PB CTL PLS)	VR603 (TRACKING SUB)	MH-2 P.B.	1. Connect an oscilloscope to TP601 and TP603. 2. Press the tracking pushbutton to the center click position. 3. Play pack MH-2, and adjust VR603 until the waveform has the phase relationship shown below. (Triggering TP610 causes the waveform at TP603 to fluctuate. Adjust to the center of the wave.) TP610 (RF SW PLS) TP603 Fluctuation (PB CTL PLS) Tracking center adjustment

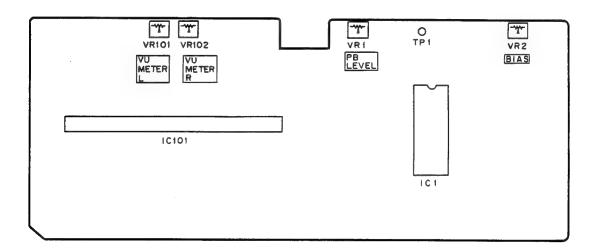
No.	ltem	Check- point	Adjustment Parts	Signal & Mode	Adjustment & Confirmation
3	Slow SUB tracking VR	TP611 (1/3 RF RESET PLS) TP603 (PB CTL PLS)	VR604 (TR SUB SLOW)	MH-2 P.B.	 Connect TP611 and TP603 to an oscilloscope. Press the tracking pushbutton to the center click position. Play back MH-2, and adjust VR604 until the waveform has the phase relationship shown below.
					(1/3 RF RESET) TP603 4 ± 2 ms (PB CTL PLS)
4	Drum lock phase (REC TIMING)	TP610 (RF SW PLS) TP1 [on jack terminal] (VIDEO OUTPUT)	Check	Color bar Standard REC mode	 Connect an oscilloscope to TP610 and TP1. Select the standard REC mode, and check the waveforms at TP610 and TP1 that their phase relationship is as shown below. Note: If a damaged tape is played back, the lock phase will show much deviation during an operation check. If tape damage is slight, check that the center of lock phase deviation meets the relationship shown below. TP610 (RF SW PLS) CVIDEO OUT) 6.5 ± 1H (416 ± 32 μs) V sync leading edge



SERVO * This circuit board is viewed from component side.

4-3. AUDIO CIRCUIT [Normal] (Audio board)

No.	item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
1	P.B.level	Audio output terminals	VR1 (P.B. LEVEL)	 Alignment tape MH-2 P.B. mode 	1. Adjust VR1 so that the audio output level shows $-10dB \pm 1dB$. (When using oscilloscope, the amplitude of the output should be $0.69V \pm 0.18Vp-p$.) O.69V $\pm 0.18Vp-p$ Audio output
2	Head bias	TP1, TP2 Audio circuit board	VR2 (Bias level)	No input signalSP (2H)REC mode	1. Connect millivoltmeter across TP1 (+) and TP2 (-) on the audio circuit board. Adjust VR2 until the voltmeter shows 3.3 ± 0.1mVrms. (S-tape should be used.)



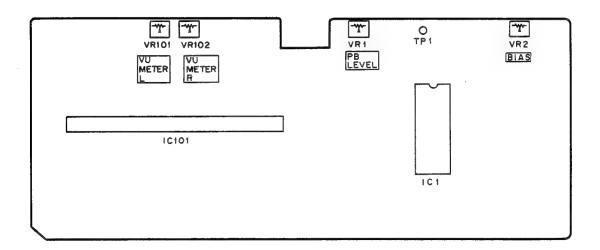
AUDIO • This cirscuit board is viewed from component side.

4-4. AUDIO CIRCUIT [Hi-Fi audio] (Audio board)

Note

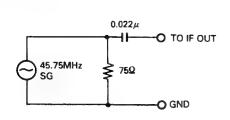
Be sure to confirm the switch positions of the front panel are as follows: Input Select switch is set to Line and Output Select switch is set to Stereo.

No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
1	VU Meter	AUDIO Output Terminal	VR101 (Lch) VR102 (Rch)	● LINE IN → 400 Hz8dBs ● E-E	 Input 400 Hz, —8 dBs and activate E-E mode. Adjust so that LINE OUT is —8 dBs. Then adjust VR101 (Lch) and VR102 (Rch) so that the VU meter becomes lit, including the "OdB" part on the VU meter.



AUDIO * This cirscuit board is viewed from component side.

4-5. TUNER IF CIRCUIT



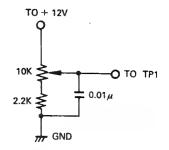
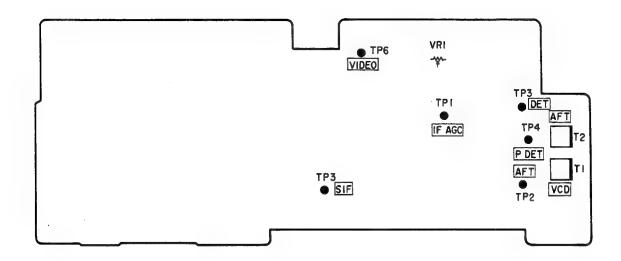


Fig. 1 Input pad

Fig. 2 IF AGC adjustment Jig

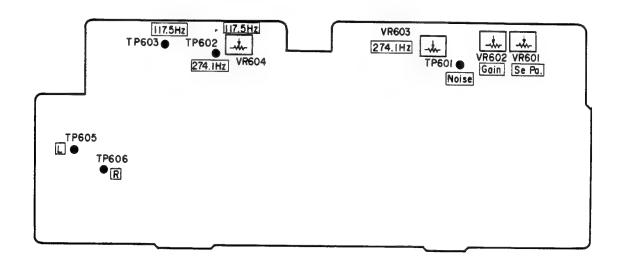
No.	item	Check Point	Adjustment Parts	Signal & Mode	Description and Waveform
	VCO (P.DET)	TP4	T1 (VCO)		 Feed 45.75MHz, 80dBu (no modulation) signal to the IF terminals of the tuner pack through the input pad shown in Figure 1. Connect TP1 to the GND. Connect digital voltmeter to TP4 and read the value. Open the TP1 from the GND. Adjust T1 until the voltmeter shows the same value obtained in the step 3.
2	V.IFT (AFT)	TP2	T2 (AFT)		 Use the test setup shown in Figure 1. Connect the IF AGC adjustment jig to TP1 and voltmeter to TP5. Adjust VR of the AGC adjustment jig until voltage at TP5 shows 3.0V. Connect oscilloscope's probe (10:1) to TP2. Slowly turn T2 and the voltage at TP2 will change rapidly from about 9V to 0.5V or vice versa. Adjust the T2 until 4.5V ± 0.5VDC is obtained.
3	RF AGC	TP6	VR1 (AGC)		 Receive a VHF signal (input signal level 61dBμ). Adjust VR1 until 6.5V ± 0.5VDC is obtained at TP6.



TUNER/IF

4-6. DECODER CIRCUIT (Decoder board)

No.	Item	Check Point	Adjustment Parts	Signal & Mode	Description
1	3.5 fH	TP601	T603	TV audio multiplex system TV channel modulator	Set the TV audio multiplex system modulator, and Receive it. Adjust T603 so that TP601 waveform will have the maximum amplitude.
2	1/57 fH	TP603	VR604	TV audio multiplex system TV channel modulator	Set the TV audio multiplex system modulater to 2-sound, and Receive it. Adjust VR604 so that TP603 waveform will have the maximum amplitude.
3	1/133 fH	TP602	VR603 VR602	TV audio multiplex system TV channel modulator	 Set the TV audio multiplex system modulator to STEREO, and Receive it. Adjust VR603 so that TP602 waveform will have the maximum amplitude. Adjust VR602 so that TP602 waveform height will have 7.5 ~ 8.5 Vp-p.
4	STEREO separation	TP605	VR601	TV audio multiplex system TV channel modulator	1. Set the TV audio multiplex system modulator to STEREO R CH 400 Hz OdB, and Receive it. 2. Adjust VR601 so that TP605 waveform will have the minimum amplitude.



DECODER - This circuit board is viewed from component side.

4-7. Video Circuit (Video board)

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
1	REC comb filter adjustment	TP415	VR404 T401	E.E	Connect an oscilloscope to TP415. Adjust VR404 and T401 alternately so that color levels of the waveform show minimum amplitude.
					Use magenta as reference. Less than 60mV Color components
2	Comb filter gain adjustment	TP416 TP413	VR414	E.E	 Connect CH1 of the oscilloscope to TP416 and CH2 to TP413. Adjust VR414 so that p-p value of white peaks of waveforms at TP416 and TP413 show the same level.
3	AGC level adjustment	TP201	VR201	E.E	1. Adjust VR201 so that the p-p value up to the white peak of the waveform at TP201 shows 2.0V \pm 0.1V
					2.0V ± 0.1Vp-p
4	Sub- emphasis	TP203	VR203	E.E VHS/S VHS :S VHS	Adjust VR203 so that the p-p value of the waveform at TP203 shows 400mV ± 20mVp-p.
	adjustment				400mVpp ± 20mVp-p
5	limiter level adjustment	1	VR202	E.E VHS/S VHS :S VHS	1. Adjust VR202 so that the DC level at T212 shows 3.48V \pm 0.05VDC, using a digital voltmeter.

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
6	Sub- emphasis output level adjustment	TP204	VR204	E.E VHS/S VHS :S VHS	1. Adjust VR204 so that white peak of the waveform at TP204 shows 800mV ± 20mVp-p.
7	VHS white & dark clip adjustment	TP205	VR209 (White) VR210 (Dark)	E.E VHS/S VHS :VHS LP mode	1. Adjust oscilloscope so that amplitude between 100% white and sync tip of the waveform at TP205 shows 5 graticules. 2. Adjust VR209 so that the white clip shows 4.5 graticules (90% ± 10%). 3. Adjust VR210 so that the dark clip shows 2.5 graticules (50% ± 10%). White clip 4.5 graticules Sync tip 2.5 graticules Dark clip Note: Make sure the waveform is not saturated with excessive clip.
8	S VHS white & dark clip adjustment	TP205	VR216 (White) VR217 (Dark)	E.E VHS/S VHS :S VHS LP mode	1. Adjust oscilloscope so that amplitude between 100% white and sync tip of the waveform at TP205 shows 5 graticules. 2. Adjust VR216 so that white clip level shows 5.5 graticules (110% ± 10%). 3. Adjust VR217 so that dark clip level shows 3.5 graticules (70% ± 10%). White clip 5.5 graticules Sync tip Jark clip Note: Make sure the waveform is not saturated with excessive clip.

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
9	Carrier deviation adjustment	TP206	VR208 VR206 (VHS mode) VR207 VR205 (S VHS mode)	E.E VHS mode SVHS mode	 Connect the probe to the carrier checker and the output of the checker to the oscilloscope. Connect the probe to TP206. Set the VTR to the VHS mode. Adjust VR208 so that sync tip matches 3.8MHz marker, and adjust VR206 so that white peak matches 4.8MHz marker. Set the VTR to the SVHS mode. Adjust VR207 so that sync tip matches 5.4MHz marker, and adjust VR205 so that white peak matches 7.0MHz marker. 4.8MHz (VHS) 7.0MHz (SVHS) 3.8MHz (SVHS)
					Note: De-emphasis should be off.
10	Color initial setting adjustment		VR401	REC VHS/S VHS :VHS SP	 Fully rotate VR408 and VR406 counterclockwise. Adjust VR401 so that DC voltage at TP401 shows 2.65 ± 0.05VDC, using a digital voltmeter.
11	EE Color level adjustment	TP412	VR412	REC VHS/S VHS :VHS SP	Adjust VR412 so that burst signal level of the color signal waveform at TP412 shows 600mVp-p. Note: Make sure the comb filter adjustment has been completed before proceeding this adjustment.

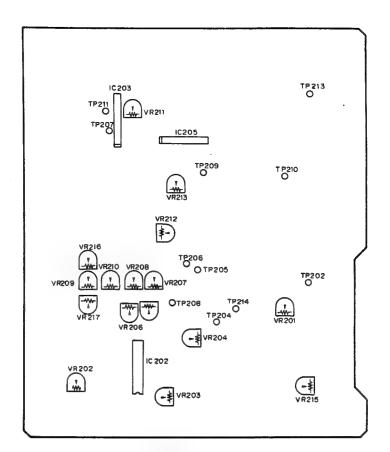
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
12	Pilot burst adjustment	TP406	VR408	REC VHS/S VHS :S VHS SP	1. Observe waveforms at TP406. Adjust VR408 so that interval between front edge of H sync signal and beginning of pilot burst signal shows $0.8\mu S \pm 0.3\mu S$.
					0.8μS ± 0.3μS
					$-\mathcal{N}\mathcal{N}$
		TP406	VR406	REC VHS/S VHS :S VHS SP	Measure at MAX part of Sync signal 2. Next, adjust VR406 so that the burst width of the pilot burst signal shows 2.2μ S \pm 0.2μ S
					$-\sqrt{2.2\mu}S \pm 0.2\mu S$
		VIDEO OUT TP406	VR403	REC VHS/S VHS :S VHS SP	3. Feed the VIDEO OUT to the A-ch of a vector scope and the color signal at TP406 to the B-ch. Trigger the scope with the A-ch signal. Adjust the VR403 so that phase of the pilot burst signal shows +90 degrees from the phase center of the burst signal.
					Burst Pilot Burst
	:				180° Burst center 0°
		TP406	VR402	REC VHS/S VHS :S VHS SP	Burst 4. Monitor waveform at TP406 with the oscilloscope and adjust CAL of the scope so that the burst signal amplitude shows 5 graticules. Adjust VR402 so that amplitude of the pilot burst shows 5.5 ± 0.2 graticules.
					5.5 graticules Pilot Burst Burst

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
13	REC current adjustment	PreAmp PCB CN506	VR501 VR502	REC VHS/S VHS :S VHS LP	1. Connect 2P of the record current adjustment jig to CN506 of the preamplifier and the alligator clip to the shield case of the preamplifier. 1.5VDC 1.5VDC 1.5VDC 1.5VDC 1.5VDC 1.5VDC 2ch OSCILLOSCOPE Pre AMP 2. Temporarily turn the VR501 fully counterclockwise. Adjust VR502 so that amplitude of red signal part shows 30 ± 2mVp-p. 3. Next, adjust VR501 so that sync part shows 120 ± 5mVp-p. REC Y LEVEL 4. After completion of the adjustment, connect the connector attached to the shield case to the CN506.
14	PBY level adjustment		VR212	REC PB VHS/S VHS :VHS LP	1. Set the VTR to VHS, LP mode. Monitor the waveform at TP201 and adjust VR212 so that PB signal level shows 2.0 \pm 0.1Vp-p.
		TP201	VR213	REC	2. Next, set the VTR to SVHS, SP mode. Monitor the waveform at TP201 and adjust VR213 so that PB signal level shows 2.0 ± 0.1Vp-p.

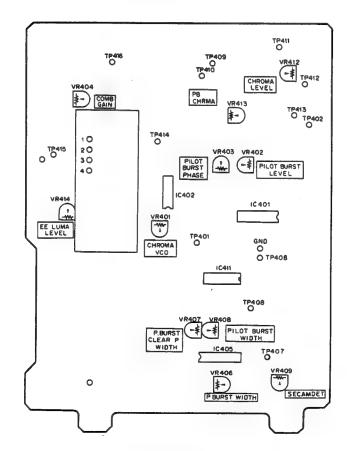
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
15	Line noise canceller adjustment	TP214	VR215	MH-2	1. Play back the VHS color bar alignment tape. 2. Monitor signals at TP214, and a difference signal between the current signal and a 1H-delayed signal will be observed. Adjust VR215 so that the DC component shows minimum.
16	Pilot burst clear pulse adjustment	TP412	VR407	REC PB VHS/S VHS :S VHS SP	Monitor signals at TP412. Adjust VR407 so that pilot burst signal of the color signal disappears. Adjust VR407 so that the pilot burst disappears.
17	PB color level adjustment	TP412	VR413	REC PB VHS/S VHS :S VHS SP	1. Monitor signals at TP412 and adjust VR413 so that the burst signal part of the color signal shows 600mVp-p ± 20mVp-p. 600mVpp ± 20mVpp

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
18	SECAM discrim- inator adjustment	TP211 TP207	VR211	PB	 Feed sinewave of 25Hz ± 3Hz, 200mVp-p ±10mVp-p to TP211. (Cut DC component with a capacitor.)*2 Play back the SVHS identification adjustment tape.*1 Adjust VR211 so that the output waveform at TP207 shows following waveform. (Oscilloscope: DC range) Ho Lo 4.8 graticules 8 graticules *1: Prepare a tape recorded with 4.9MHz carrier signal before proceeding this adjustment and use the tape as the SVHS identification adjustment tape. (Either of a VHS or a SVHS tape will be used.) *2: Cut off the DC component with a 1μF capacitor connected as shown below.
19	SECAM discrim- inator adjustment	TP407	VR409	REC SECAM Color bar VHS/S VHS :VHS	1. Monitor waveforms at TP407 while recording the SECAM color bar signal. Adjust VR409 so that the amplitude shows 4.0 ± 0.1Vp-p. NG OK NG 2. After completion of the adjustment, play back the tape just recorded and check the same waveform is obtained.

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
20	color CTRL adjustment	PAL color bar SVHS Playback of auto-recording	VR1	TP412 (Trigger TP208)	Adjust VR1 so that the burst part shown below is $200\mu S \pm 50\mu S$.
			1		Adjust after PB chroma adjustment.



VIDEO-Y

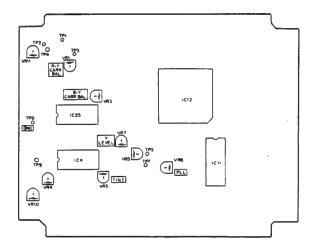


VIDEO-C

4-8. DIGITAL CIRCUIT (Digtal board)

No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
					The adjustment of this circuit should be performed to reduce temperature drift influence after approximately ten minutes have passed since power was supplied.
1	Input Signal LEVEL (EE/PB)	TP3 EE/PB VIDEO (Y)	CHECK	EE, LINE (1Vpp, 75Ω) Color Bar	Input this signal and look at TP1 on the oscilloscope. Check if the EE/PB input signal level is 2.0Vp-p.
2	NR PLL	TP5	VR8	EE LINE Color Bar	Adjust the level of TP5 on the oscilloscope as shown below. 8 div. 3.0±0.1 div.
		Monitor Screen	VR9	DIGITAL MEM- ORY ON EE LINE Color Bar	1) Adjust VR9 so that the jitter on the border of the color bar will disappear. Jitter
		TP8	VR8	DIGITAL MEMORY ON	2) At this time, confirm that the voltage of TP551 is 2.9 \pm 0.25 Vpp, if it is out of this range, adjust VR8 in the digital memory mode, so that the voltage at TP8 becomes 2.9 \pm 0.1V.
3	Y-LEVEL	Video OUT	VR7	EE LINE Color Bar DNR II	Adjust VR7 so that the voltage between the sync tip and white peak is 1.0 Vpp.
4	CHROMA LEVEL	Monitor sensor VIDEO OUT	VR4	Same as above EE LINE DNR II	Adjust VR4 so that the burst level is 0.3Vp-p.

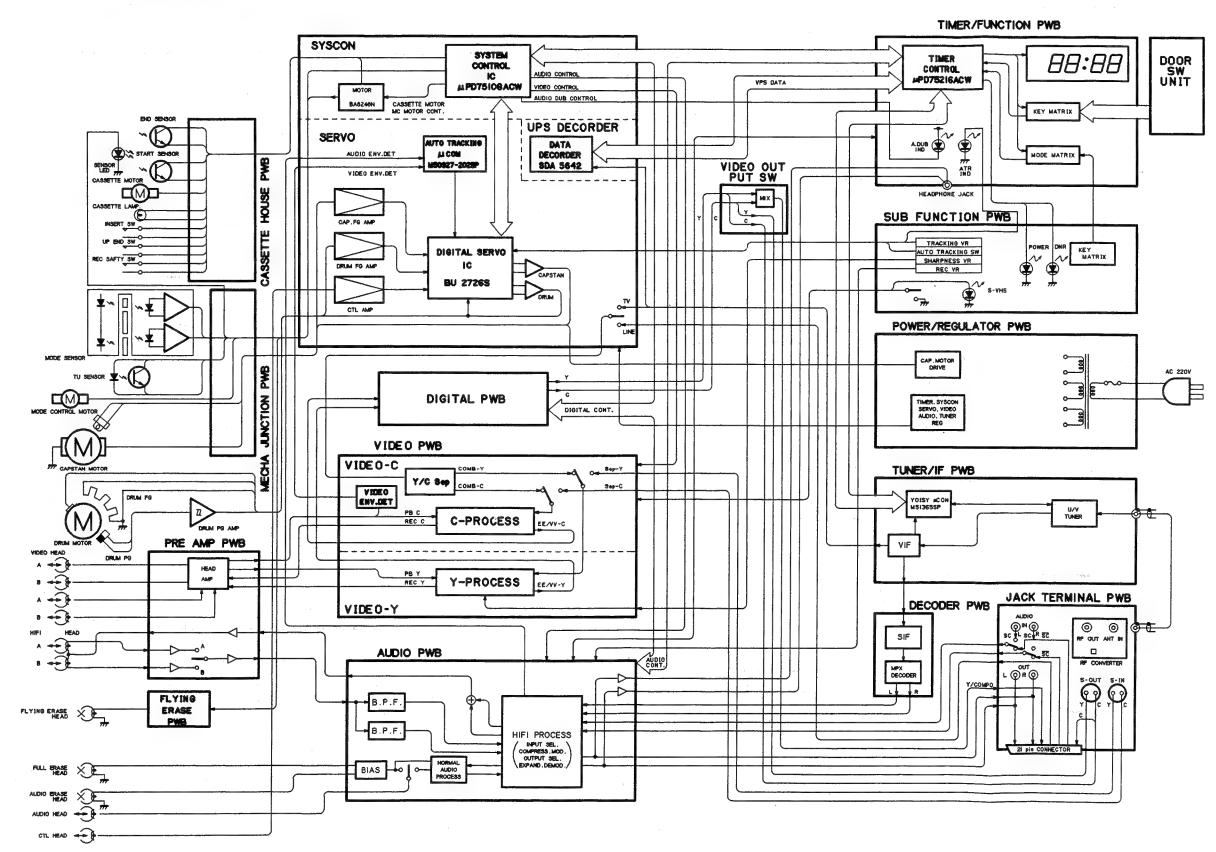
No.	Item	Check-point	Adjustment Parts	Signal & Mode	Description and Waveform
5	B-Y CARR BALL R-Y CARR BAL	Video OUT	VR1 VR3	EE LINE Color Bar DNR II	Adjust VR1 and VR3 so the proportion of chroma on the white part of the color bar is at a minimum. Before adjustment After adjustment This part
6	TINT	Monitor TP2 Screen	VR5	EE LINE DNR II	Adjust VR5 so that the amplitude of the color waveform becomes stable and maximum. In addition, the waveform should not be jittery. Max



DIGITAL • This circuit board is view from component side.

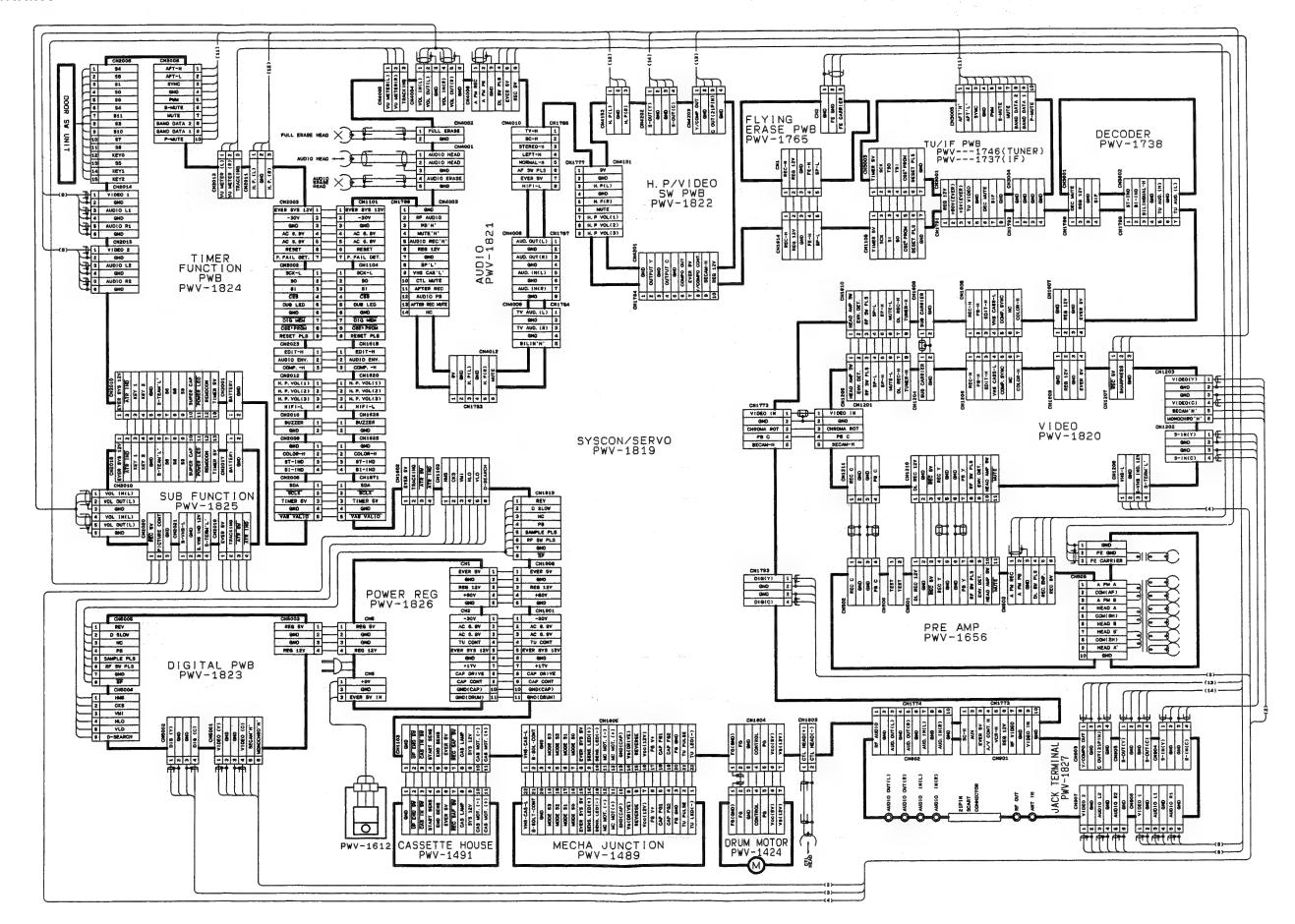
SECTION 4 BLOCK AND SCHEMATIC DIAGRAM

1. GENERAL BLOCK DIAGRAM

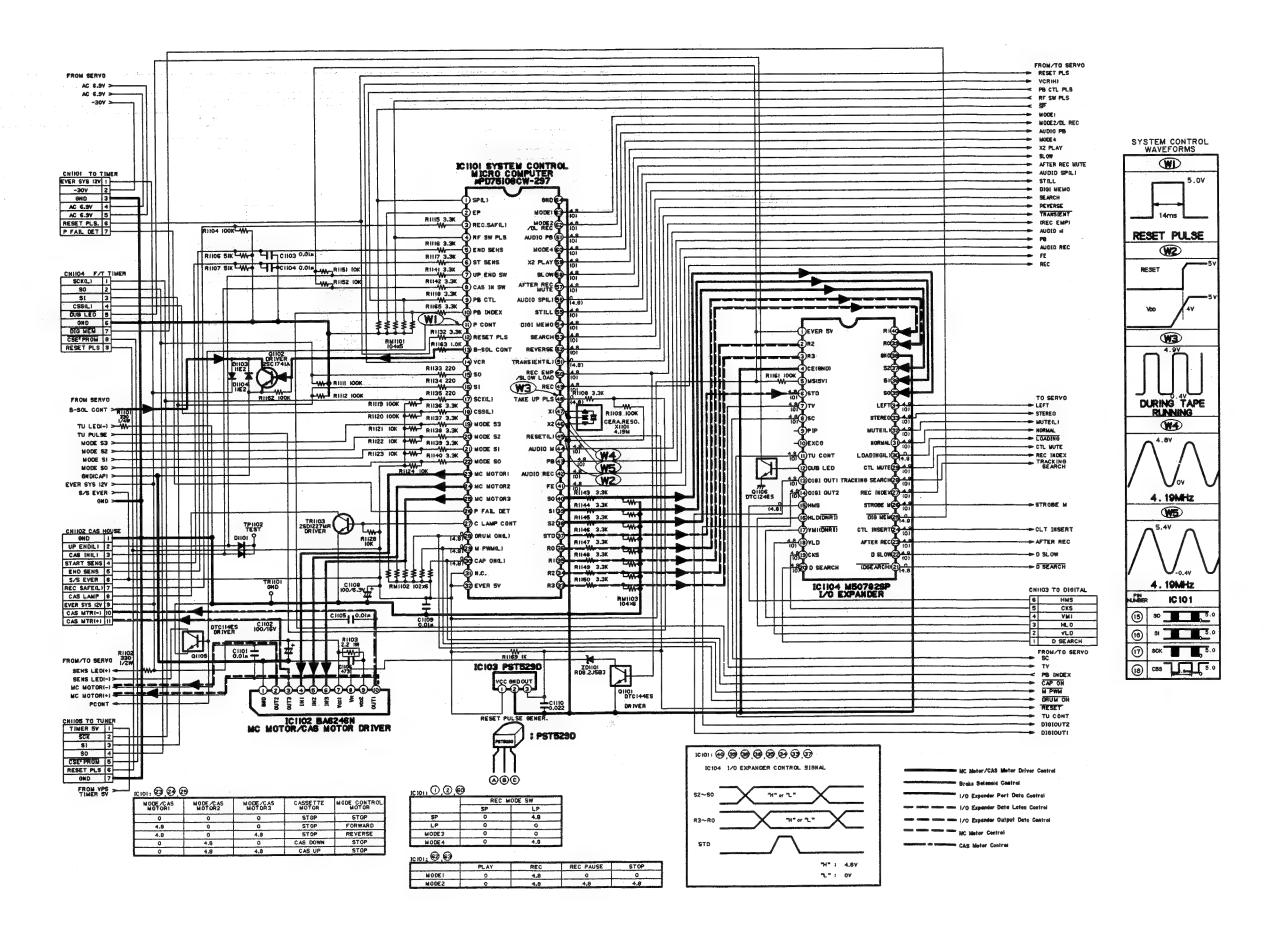


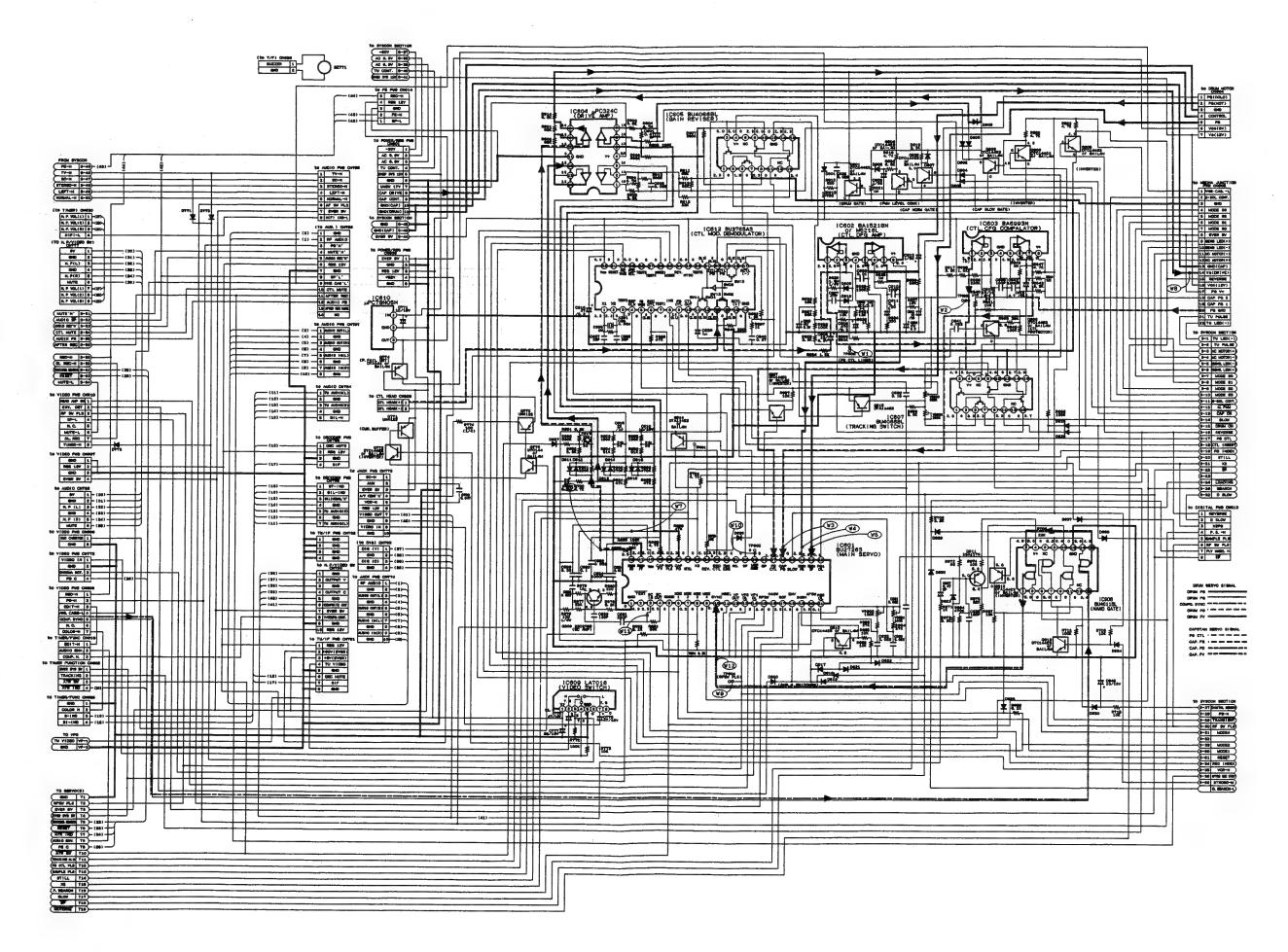
2. SCHEMATIC/CIRCUIT BOARD DIAGRAMS

2-1. FRAME WIRING



2-2. SYSTEM CONTROL SCHEMATIC DIAGRAM

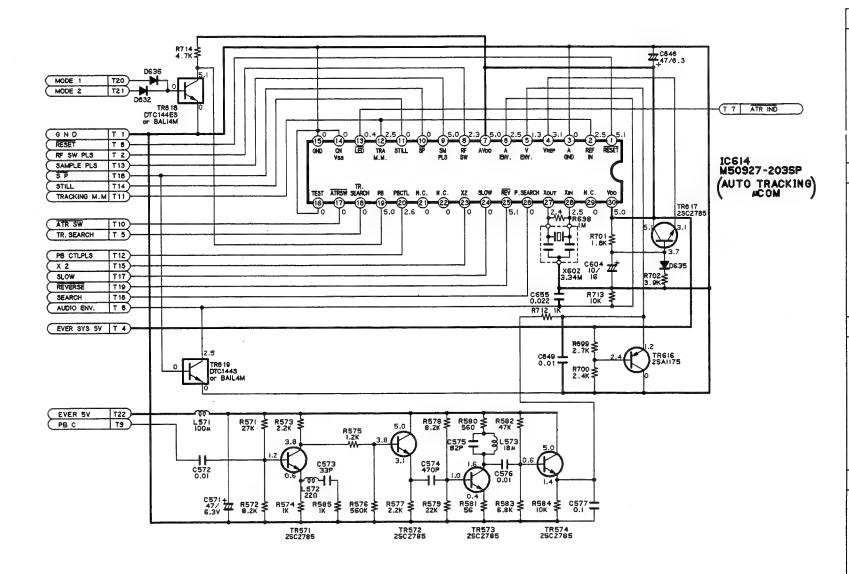


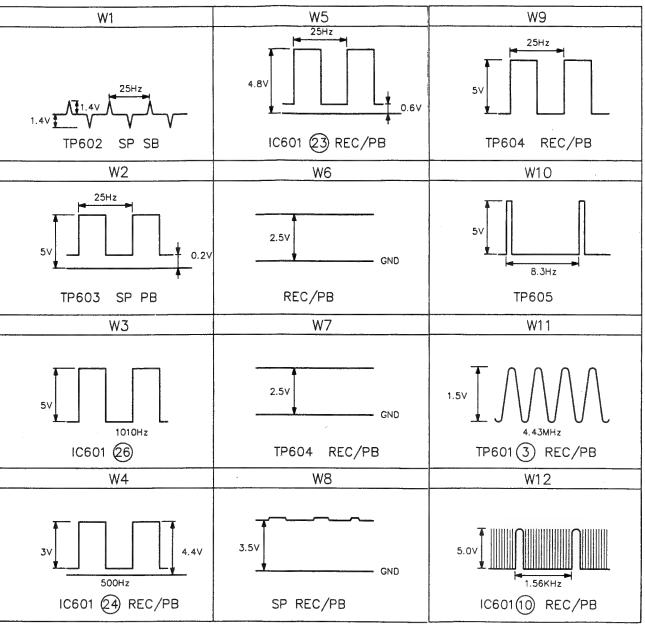


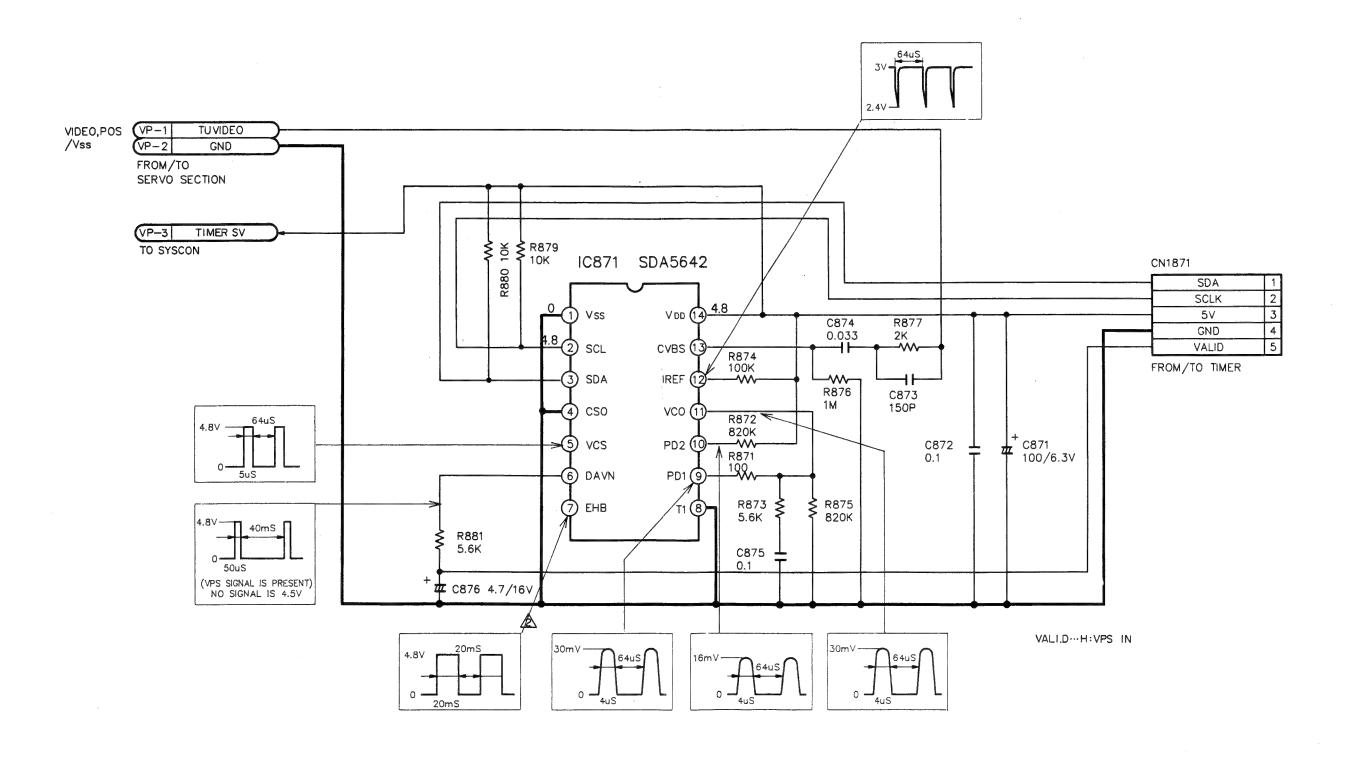
4-7

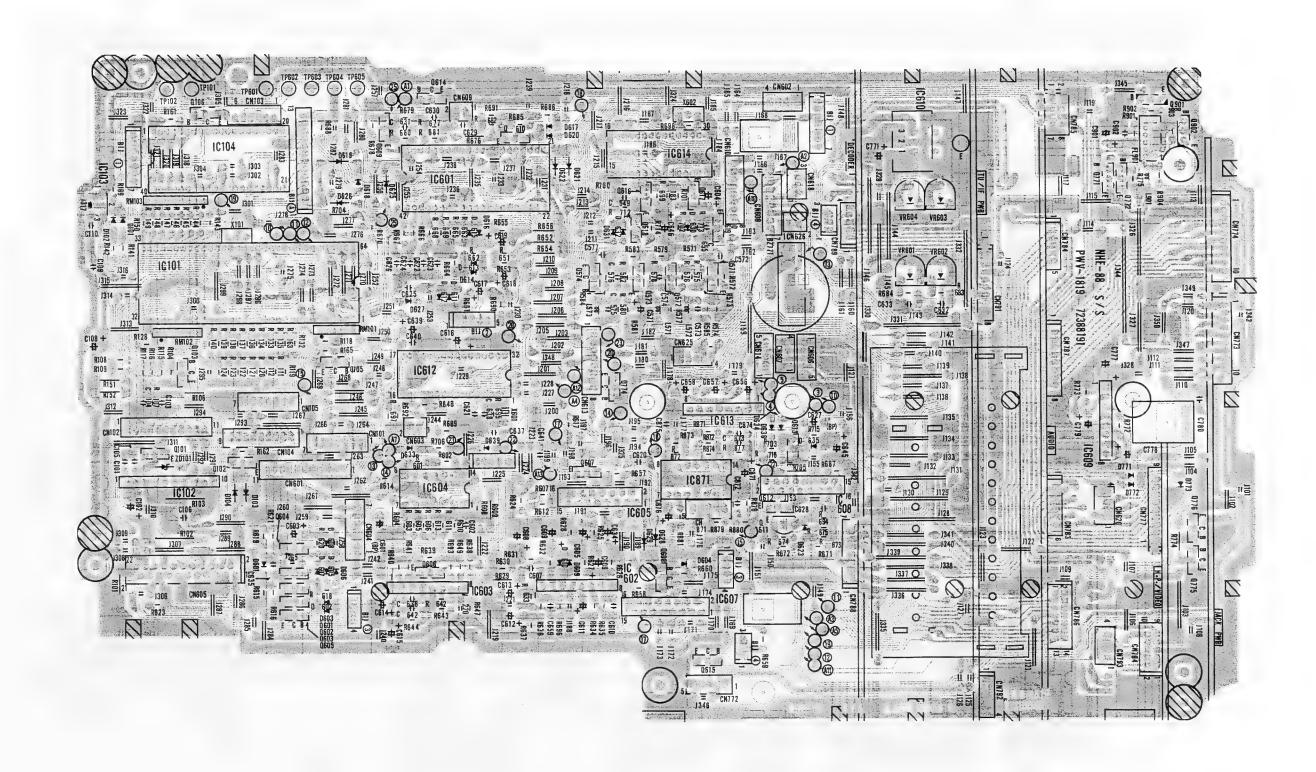
2-4. SERVO (AUTO TRACKING) SCHEMATIC DIAGRAM

SERVO WAVEFORMS



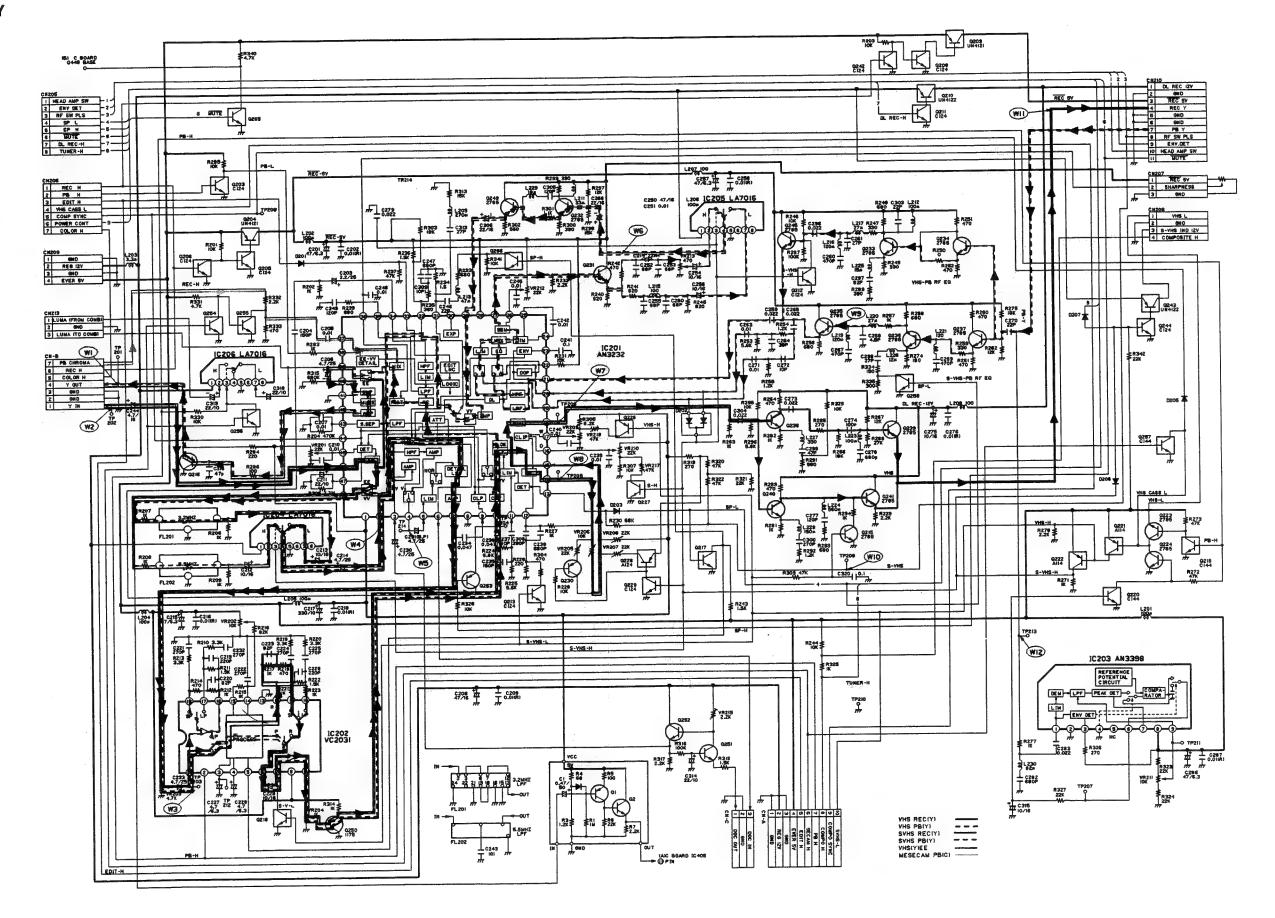


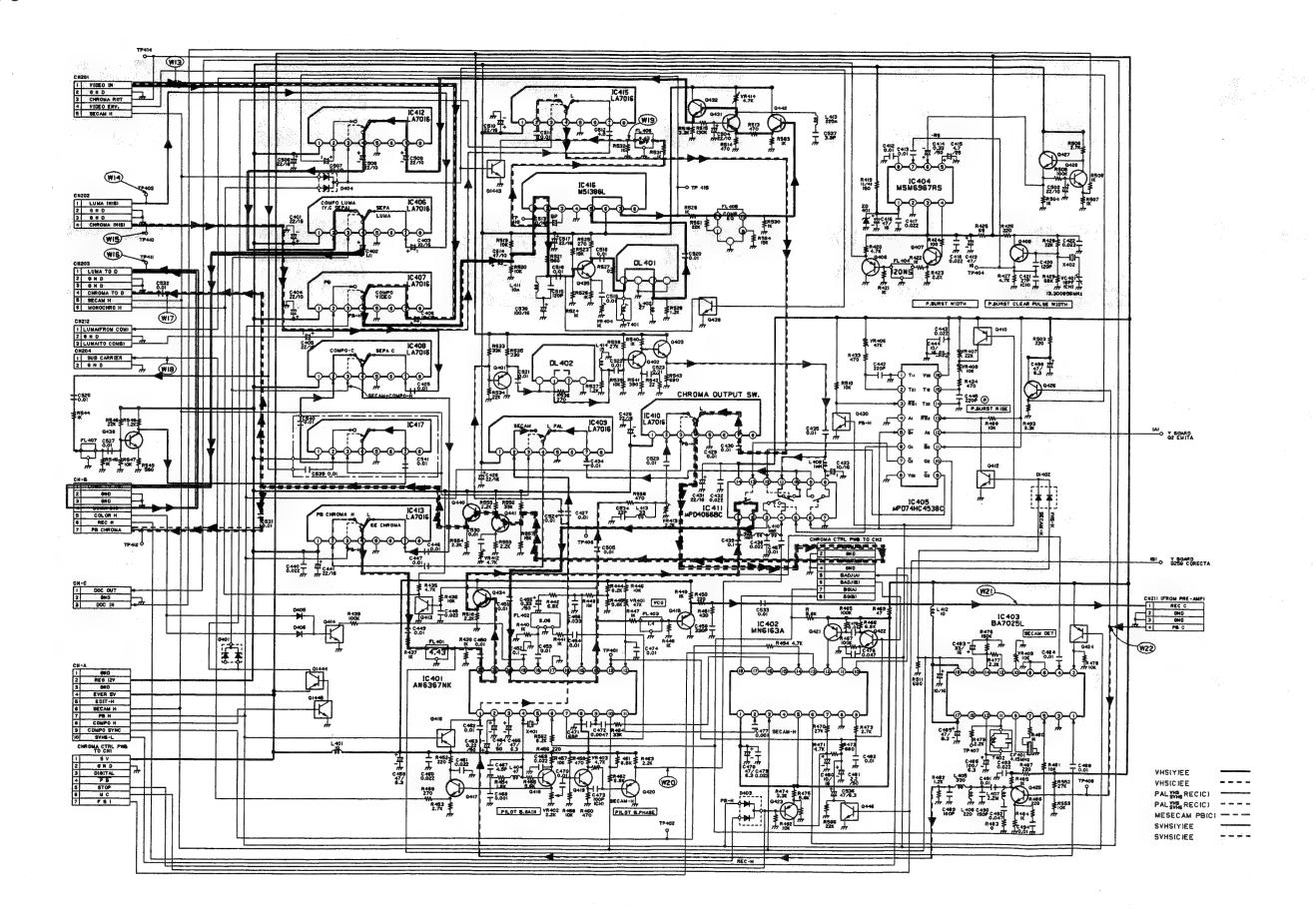




2-7. VIDEO SCHEMATIC DIAGRAM

VIDEO-Y





IC's AND TR'S TERMINAL VOLTAGE OF THE VIDEO SECTION

VIDEO (Y)

	REC (V)	PLAY (V
E B C	5.0 4.4 4.5	5.0 4.4
E B C	5.0	3.9° 4.6 5.0
E B	-1.4 m 87.3 m	-0.9 n
E B	5.0 5.0	6.6 m 5.0 26.3 m
E B	232.1 m -0.7 m 6.3 m	4.9 -0.3 3.5
E B	5.0 -0.2 m 4.9	-0.3 m 45.0 m
C	6.5 m -0.5 m	3.5 -0.8 n
C	5.0 5.0	3.5 27.3 m 5.0
B C	349.5 m	24.1 m 4.9 11.9
B C	21.8 m 11.8	11.9 1.8 n
B	-0.4 m 5.9 21.6 m	-5.1 n 10.8 m 11.9
E B C	-0.5 m 4.9 1.6 m	422.7 i
E B C	1402.1 m 14.5 m 478.3 m	5.0
E B C	-4.1 m 579.1 m 9.2	-3.7 r 612.2
E B C	2.1 1432.8 m -4.0 m	2.1 1445.0 -2.1 r
E B C	-0.3 m 18.1 m 4.4	-0.1 r 20.7 n 4.4
E B C	-0.4 m 0.7 2.0	-0.3 r 5.0 3.9 m
E B C	-4.3 m 84.3 m	-4.4 r 4.9 21.4 n
E B		-4.3 r
E B	5.0 5.0	5.0 11.2 n
E B	5.0 658.2 m	5.0 5.0 5.0
E B	4.6 5.0	425.5
E B	-0.5 m 86.4 m	-4.6 r 629.3
E B	4.8 1.4 m	11.1 n 4.9 5.0
E B C	4.8 -4.0 m 4.9 3.5 m	0.2 m 425.2 1674.6
	EBC	E 5.0 B 4.4 C 4.5 E B

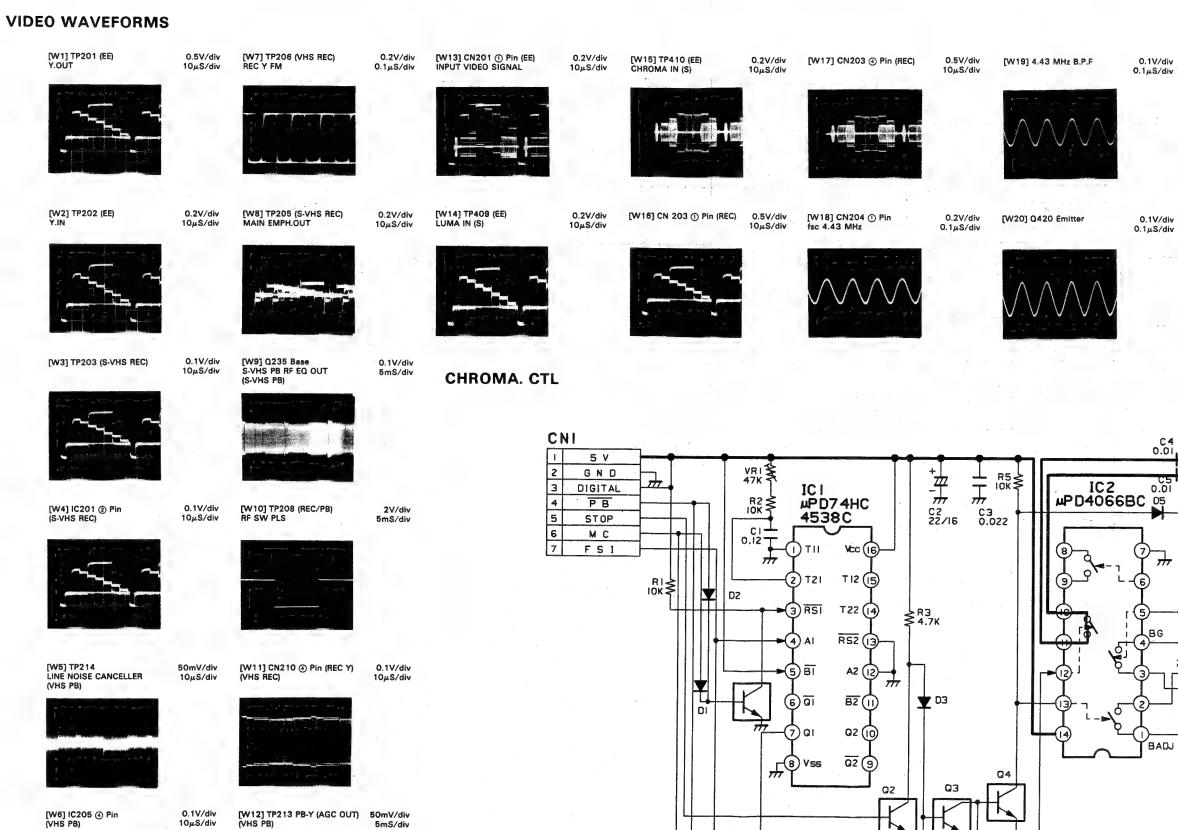
]	REC (V)	PLAY (V)
Q-228	E	4.8	4.9
	B	1.4 m	4.9
	C	4.8	2.0
Q-229	E	-4.0	0.2 m
	B	4.9	425.1 m
	C	1.4 m	4.9
Q-230	E	2.0	2.1
	B	1443.1 m	4.9
	C	2.0	2.0
Q-231	E	-4.5 m	1573.5 m
	B	-4.5 m	2.2
	C	232.4 m	4.8
Q-232	E B C	-4.8 m 126.7 m 232.1 m	1.9 2.6 4.8
Q-233	швс	-0.6 m -0.6 m 235.4 m	571.9 m 1188.7 m 4.8
Q-234	E B C	-0.6 m 93.5 m 235.5 m	1193.2 m 1826.2 m 3.7
Q-235	E	-0.1 m	3.6
	B	235.5 m	2.8
	C	235.5 m	4.9
Q-236	E	-0.2 m	551.5 m
	B	-0.2 m	1188.0 m
	C	235.5 m	3.7
Q-237	E	-0.3 m	1192.4 m
	B	93.4 m	1824.3 m
	C	235.4 m	3.6
Q-238	E B C	3.8 4.1 10.1	-2.4 m 426.7 m
Q-239	E	9.1	-5.6 m
	B	8.1	-2.3 m
	C	11.7	-1.6 m
Q-240	E B C	3.7 4.1 9.8	
Q-241	E	9.1	-5.5 m
	B	9.8	-1.4 m
	C	11.7	-1.4 m
Q-242	E	-0.5 m	-0.4 m
	B	4.9	44.9 m
	C	6.6 m	3.5
Q-243	E	11.9	12.0
	B	1.5 m	-4.7 m
	C	1.3 m	-4.6 m
Q-244	E	-0.4 m	-4.5 m
	B	4.9	425.3 m
	C	-0.2 m	-4.7 m
Q-246	E B C	-0.6 m 4.4 1.2 m	-4.8 m 4.4
Q-249	E	-0.3 m	1302.4 m
	B	-0.3 m	1932.8 m
	C	235.8 m	4.8
Q-250	E B C	1804.3 m 1158.1 m -0.1 m	1700.2 m 1055.4 m
Q-250	E B C	1.8 1.2 -0.3 m	1701.8 m 1048.8 m
Q-251	E	7.4	7.4
	B	8.0	8.0
	C	9.7	9.7
Q-252	E	9.0	9.1
	B	9.7	9.7
	C	11.9	11.9
Q-253	E B C	1803.8 m 5.0 1802.7 m	5.0 1697.6 m
Q-254	E B C	-0.7 m 590.1 m 4.1	590.1 m 4.1

, ,		REC (V)	PLAY (V)
Q-255	E	-0.6 m	-4.4 m
	B	4.1	4.1
	C	1.3 m	-2.5 m
Q-256	E	-1.0 m	-4.6 m
	B	590.0 m	588.9 m
	C	87.3 m	4.8

VIDEO (C)

		REC (V)	PLAY (V)
Q-401	E	1.7	1.7
	B	1.0	1.0
Q-402	C E	0.6 m 0.7	-3.5 m
Q-402	ВС	1.3 3.2	1.3 3.2
Q-403	E	2.5	2.6
	B	3.2	3.2
	C	5.0	5.0
Q-406	E	2.0	2.0
	B	1.4	1.4
	C	1.4 m	-2.6 m
Q-407	E	2.7	2.7
	B	3.3	3.3
	C	4.0	4.0
Q-408	E	3.1	3.1
	B	3.6	3.6
	C	4.9	4.8
Q-410	E	5.0	5.0
	B	88.1 m	4.9
	C	5.0	7.7 m
Q-412	E B C	0.4 m 0.3 5.0	4.5 7.7 m
Q-413	E	-0.3 m	1.6 m
	B	1.9	1.9
	C	71.4 m	68.8 m
Q-415	E B C	-4.2 m	-4.3 m
Q-416	E	5.0	5.0
	B	85.3 m	4.9
	C	5.0	3.0
Q-417	E	1.8	1.9
	B	2.3	2.3
	C	4.9	4.8
Q-418	E	2.3	2.3
	B	2.9	2.9
	C	4.8	4.7
Q-419	E	1.8	1.8
	B	2.4	2.4
	C	3.2	3.1
Q-420	E	2.4	2.4
	B	1.8	1.8
	C	0.3 m	-1.5 m
Q-421	E B C	4.9 5.7 0.5	4.9 4.8
Q-422	E B C	3.1 3.6 4.5	3.1 4.7
Q-423	E B C	3.1 4.4 3.6	3.1 4.3
Q-424	E	4.7	4.8
	B	88.7 m	4.9
	C	4.7	0.7 m
Q-425	E B C	0.7 1.3 4.2	1.3 4.1
Q-426	E	0.7	0.7
	B	1.3	1.3
	C	5.0	5.0

VIDEO (C)		IC402	IC406	IC412
	REC (V) PLAY (V)	REC (V) PLAY (V)	REC (V) PLAY (V)	REC (V) PLAY (V)
Q-427 E B C	4.0 4.0 4.6 4.9 11.9 11.9	1 4.9 4.9 2 2.6 2.6 3 0.6 0.6	1 11.9 11.9 2 7.8 7.8 3 4.4 4.4	1 11.9 11.9 2 7.8 7.8 3 0.2 0.2
Q-428 E B C	2.7 2.9 3.3 3.6 4.6 4.9	4 0.3 0.3 5 4.9 4.9 6 5.0	4 7.1 7.1 5 0.2 m -3.4 m	4 7.1 7.1 5 -0.4 m -0.6 m
Q-430 E B C	2.5 2.6 3.2 3.2 5.0 5.0	7 3.6 2.6 8 -0.1 m -0.8 m 9 3.7 2.6	7 7.8 7.8 8 1C407	7 7.8 7.8 8 IC413
Q-434 E	2.8 2.8 3.4 3.4	10 3.6 2.6 11 88.2 m 4.9 12 0.5	REC (V) PLAY (V)	REC (V) PLAY (V)
Q-439 E B	5.0 5.0 0.2 m 0.7 m 0.3 255.6 m	13 0.4 m 0.3 14 4.8 0.3 15 4.9 4.9 16 2.5 2.5	1 11.9 11.9 2 7.8 7.8 3 88.3 m 4.9	1 11.9 11.9 2 7.7 7.8 3 88.4 m 4.9
Q-440 E B	1.3 8.2 8.8 8.9	17 0.7 m 2.4 m 18 4.9 4.6	4 7.2 7.2 5 0.6 m -2.0 m	4 7.1 7.1 5 0.6 m -2.0 m
Q-441 E	11.9 11.9 3.1 3.1 3.7 3.7	IC403	7 7.8 7.8	7 7.8 7.8 8 20.0
Q-515 E	8.8 8.9 -1.8 -2.5 m	1 3.4 3.4 2 4.7 -0.4 m	IC408 REC (V) PLAY (V)	REC (V) PLAY (V)
B C	4.7 254.5 m 4.7 4.7	3 -2.5 -0.4 m 4 3.4 3.4 5 4.9 4.6	1 11.9 11.9 2 7.8 7.8	1 11.9 11.9 2 7.7 7.8
REC (V) PLAY (V	IC205	6 -2.7 -1.6 7 4.3 4.2 8 -2.7 m -1.6 m	3 4.4 4.4 4 7.1 7.2 5 0.2 m -2.4 m	3 4.8 4.8 4 7.1 7.1 5 0.6 m -2.4 m
1 1972.2 m 1951.6 g 2 86.7 m 4.9	1 11.9 11.9 2 7.7 7.8	9 2.9 2.9 10 -2.7 m 21.7 m 11 3.6 3.5	6 7 7.8 7.8 8	6 7 7.8 7.8 8 7.8
3 3.5 3.4 4 3.3 3.3 5 4.5 4.4	3 4.9 420.7 m 4 7.1 7.1 5 0.2 m -4.8 m	12 -2.4 m 13 3.6 3.5 14 1602.4 m	IC409	IC416
6 3.8 3.7 7 1995.7 m 8 4.9 4.9 9 1590.9 m 1443.2	8 7.8 7.8 8	15 0.8 m 16 0.6 0.6 17 4.7 4.8	REC (V) PLAY (V) 1 11.9 11.9 2 7.8 7.8	REC (V) PLAY (V) 1 8.0 5.9 2 5.8 5.8
10 3.7 3.6 11 3.7 3.6	IC206	18 4.7 4.8 IC404	3 0.6 0.6 4 7.1 7.1 5 0.6 m -1.0 m	3 4.0 4.0 4 5 1022.7 m 1016.7 m
12 3.7 3.7 13 0.8 m -4.0 m 14 3.6 3.6 15 3.6 3.6	REC (V) PLAY (V) 1 11.9 12.0 2 7.8 7.8	REC (V) PLAY (V)	6 7 7.8 7.8 8	6 11.9 11.9 7 6.4 6.4 8 6.6 6.6
16 1941.5 m 1921.3 m 17 1941.6 m 1.9	3 83.7 m 4.8 4 7.1 7.1	1 9.2 9.2 2 1.1 m 1.5 m 3 4.0 4.0	IC410	0 0.0 0.0
18 1939.9 m 1919.7 i	6 7 7.8 7.8 7.8	4 3.3 3.3 5 3.2 3.2 6 2.1 2.1	REC (V) PLAY (V) 1 11.9 11.9	
REC (V) PLAY (V		7 1.6 1.6 8 4.74 4.75	2 7.8 7.8 3 88.3 m 4.9 4 7.1 7.1	
2 0.3 -4.3 m 3 5.0 4.8 4 0.3 m -4.3 m	1 50 20	IC405 REC (V) PLAY (V)	5 0.3 m -3.4 m 6 7 7.8 7.8	
5 5.0 6 3.3	2 3.0 3.2 3 3.2 3.2 4 2.9 2.9	1 0.7 m -1.6 m 2 5.0 5.0	IC411	
7 3.8 3.6 8 5.0 5.0 9 2.1 2.1	5 3,1 3.3 6 3.4 3.3 7 3.6 3.6	3 5.0 5.2 m 4 0.7 m -1.9 m 5 0.8 m 0.4	REC (V) PLAY (V)	
IC204	8 5.0 5.0 9 4.0 3.9	6 0.7 m -1.6 m 7 5.0 5.0 8 0.7 m -1.6 m	1 2 3	
REC (V) PLAY (V 1 11.9 11.9 2 7.8 7.8	11 4.1 4.1 12 1.0 1.0 13 3.6 2.6	9 5.0 5.0 10 0.8 m 0.4 11 5.0 5.0	4 5 0.9 m -0.7 m 6 0.9 m 0.4 m	
3 4.9 419.5 n 4 7.1 7.1 5 0.4 -4.1 m	1 14 2.6 2.6 15 2.5 2.5	12 4.0 0.4 13 5.0 5.0 14 5.0 4.5	7 0.4 m -1.1 m	
6	17 -0.1 m -0.6 m 18 3.0 3.0	15 0.7 m -0.7 m 16 5.0 5.0	10 0.8 0.5	
7 7.8 7.8	19 1.3 2.8		12 5.0 4.6	



A D4

[W21] CN211 ① Pin REC CHROMA (VHS REC)

[W22] TP408 (VHS PB) PB-C (ENVELOPE)

CN2

★D6

1 CHROMA(A)

3 CHROMA(B)

G N D

G N D BADJIAI

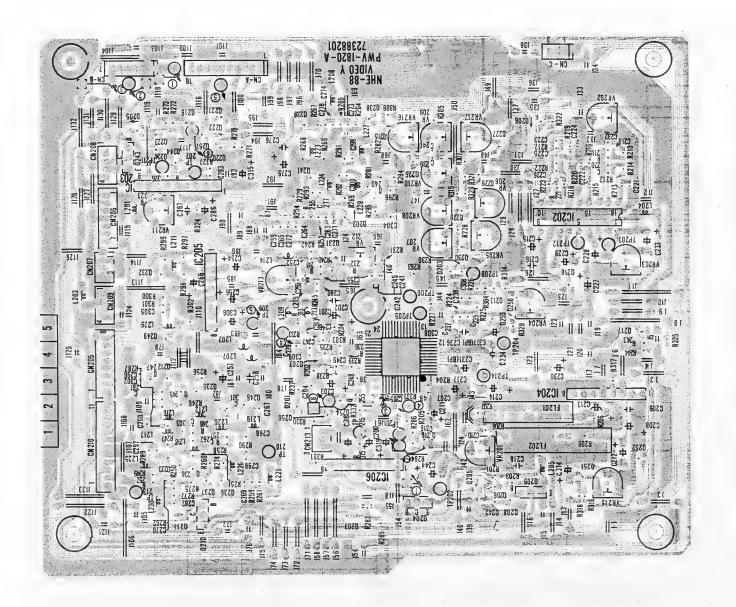
BADJ(B) B GIAI

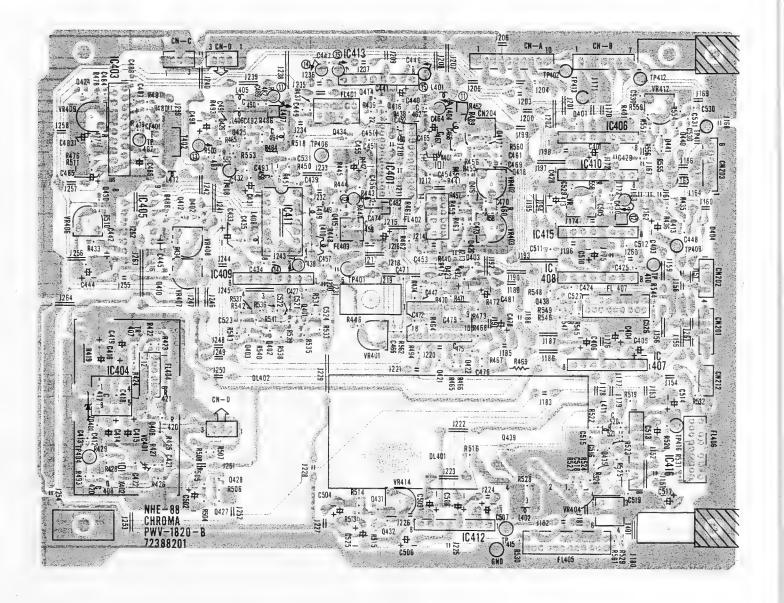
B G(B)

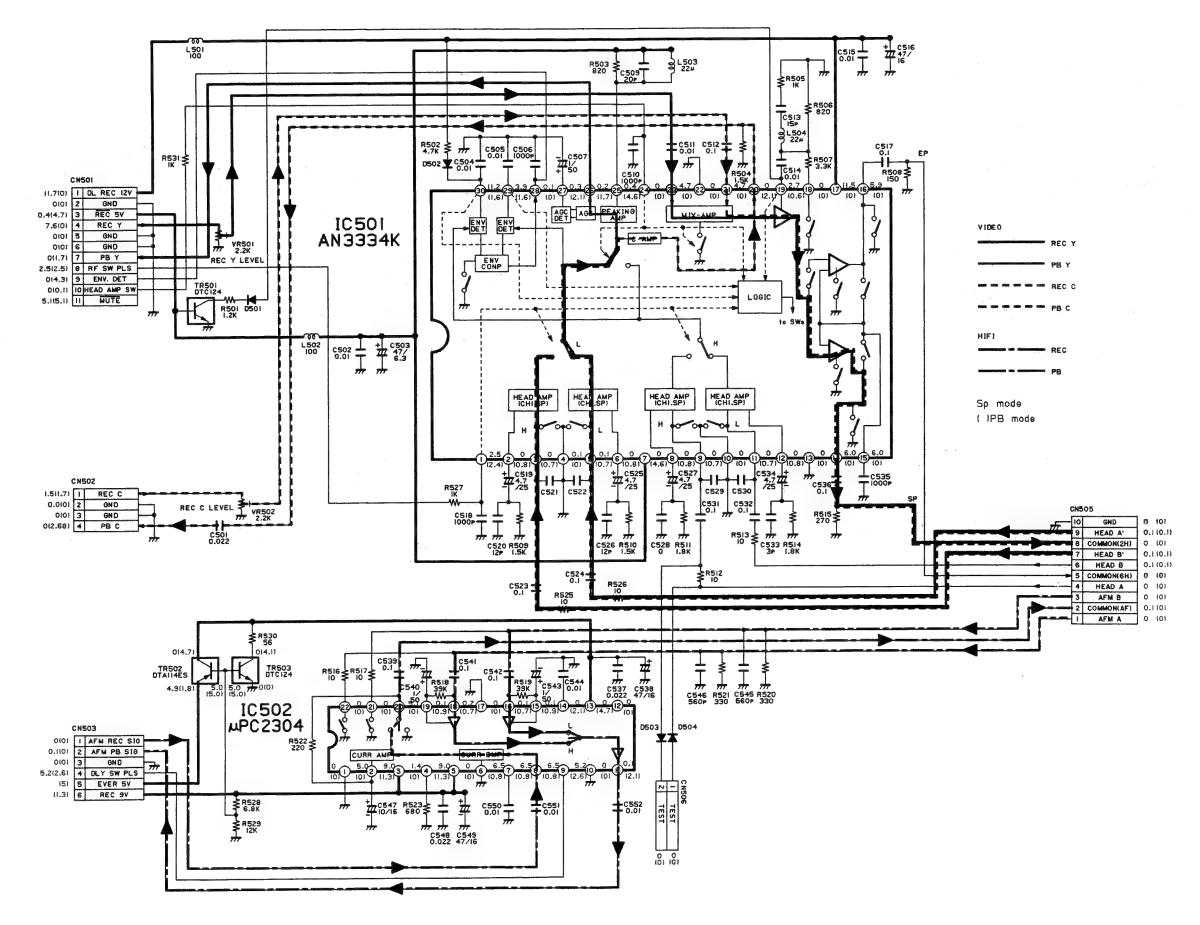
50mV/div

50mV/div

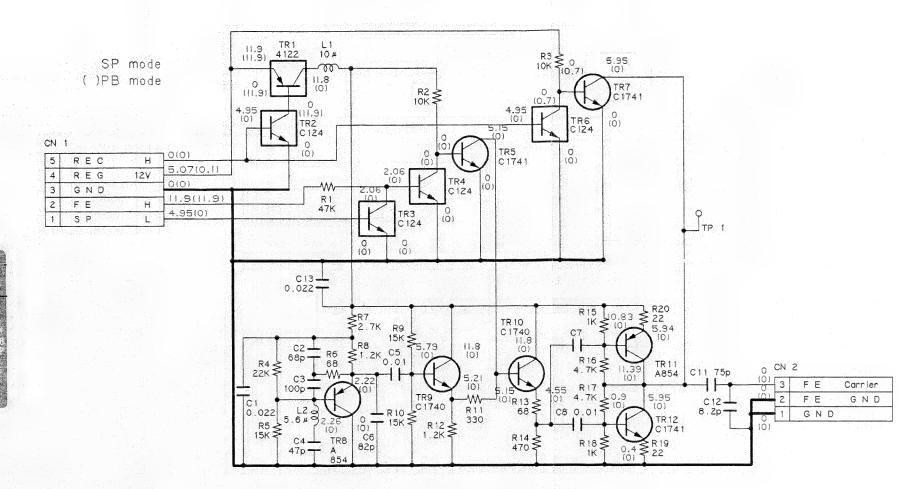
2-8. VIDEO CIRCUIT BOARD (SOLDER SIDE)





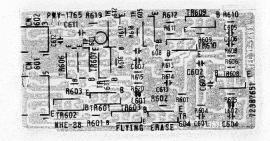


2-11. FLYING ERASE SCHEMATIC DIAGRAM

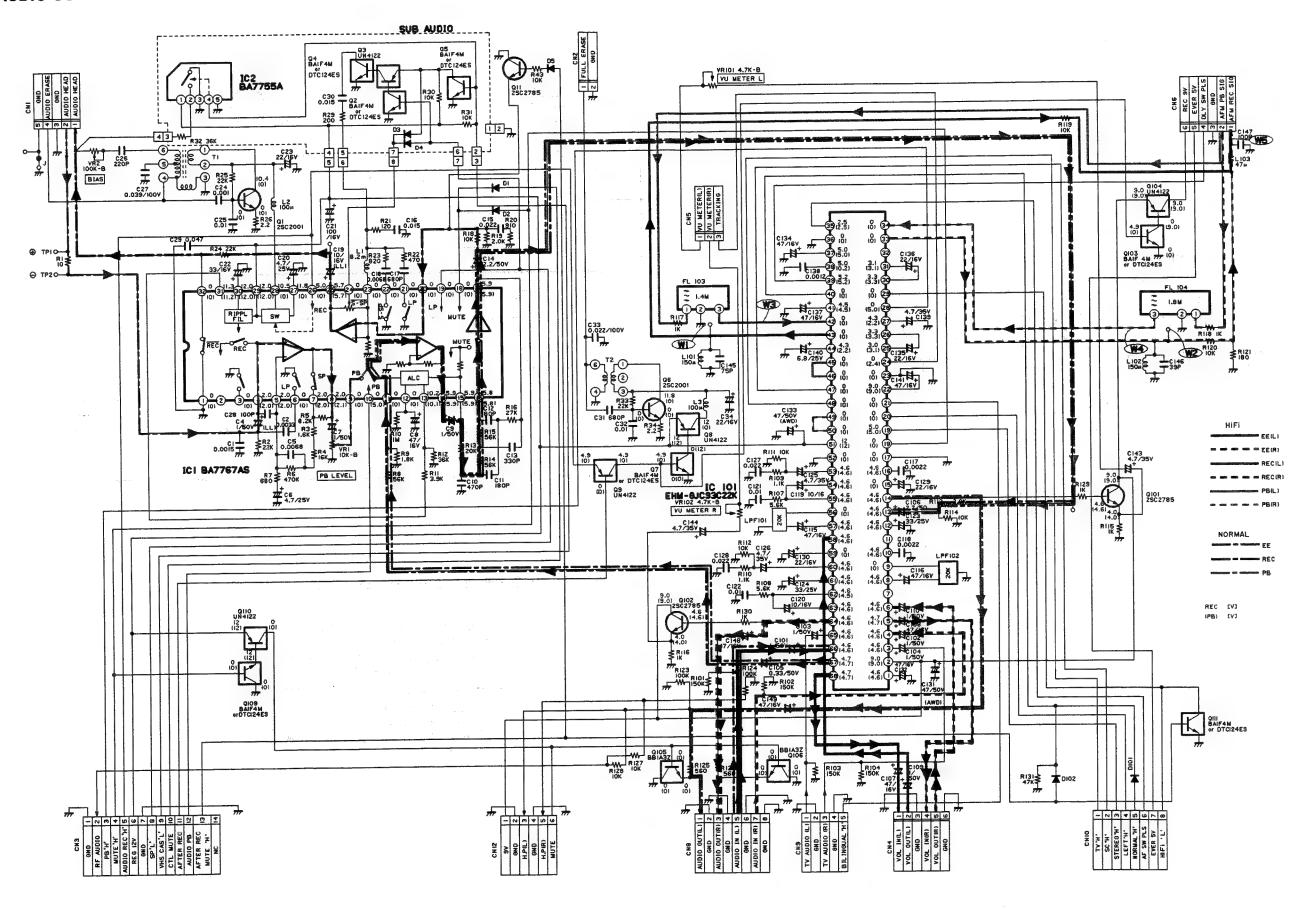


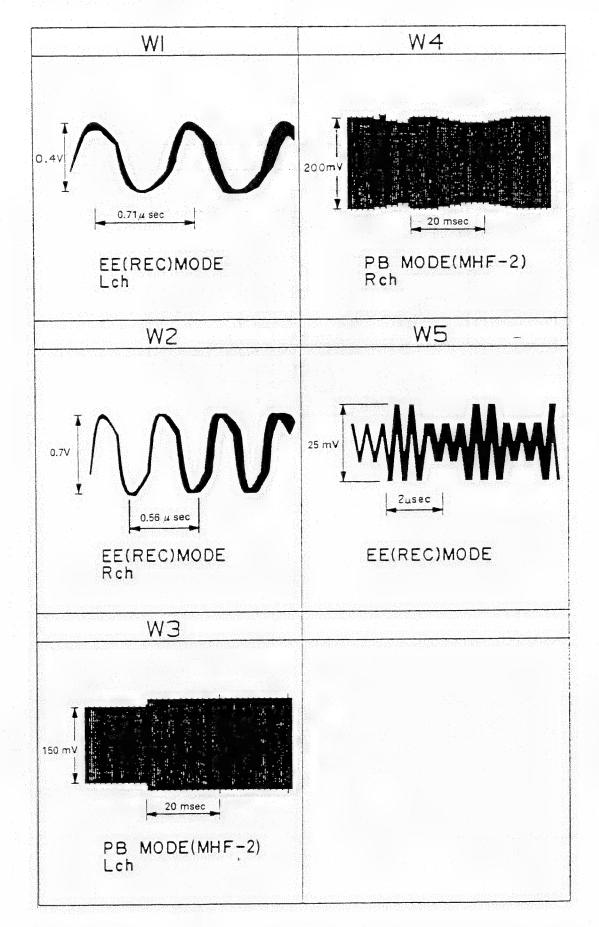
Parts No.600~

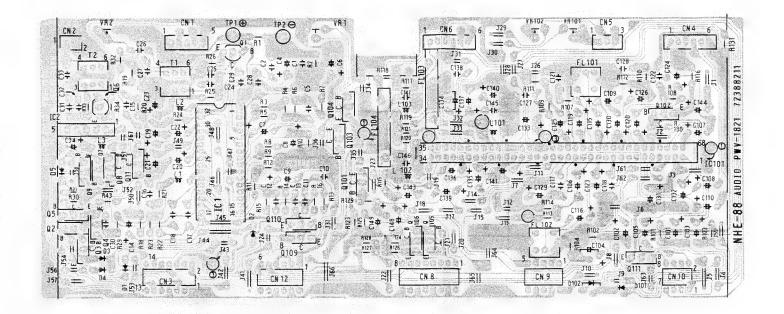
2-12. FLYING ERASE CIRCUIT BOARD

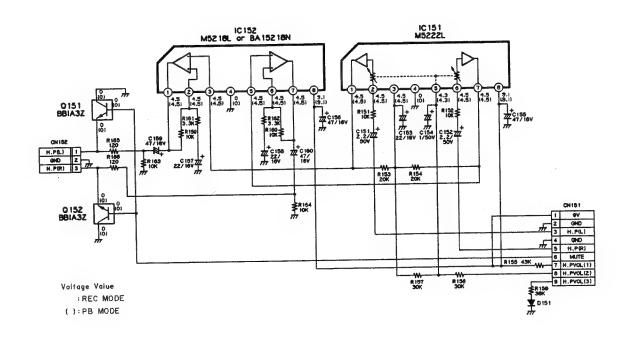


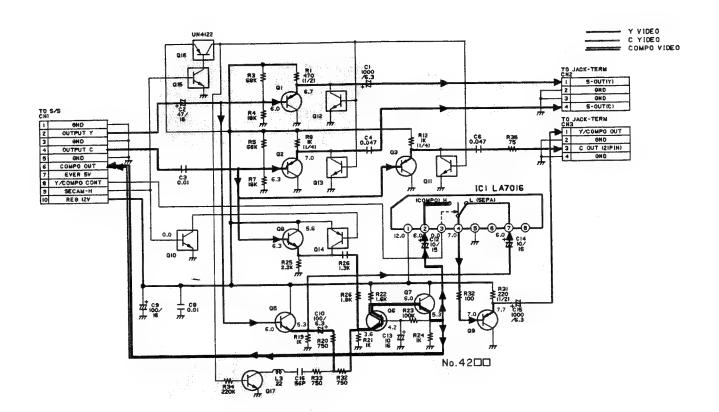
2-13. AUDIO SCHEMATIC DIAGRAM



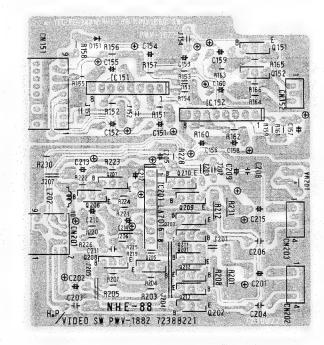


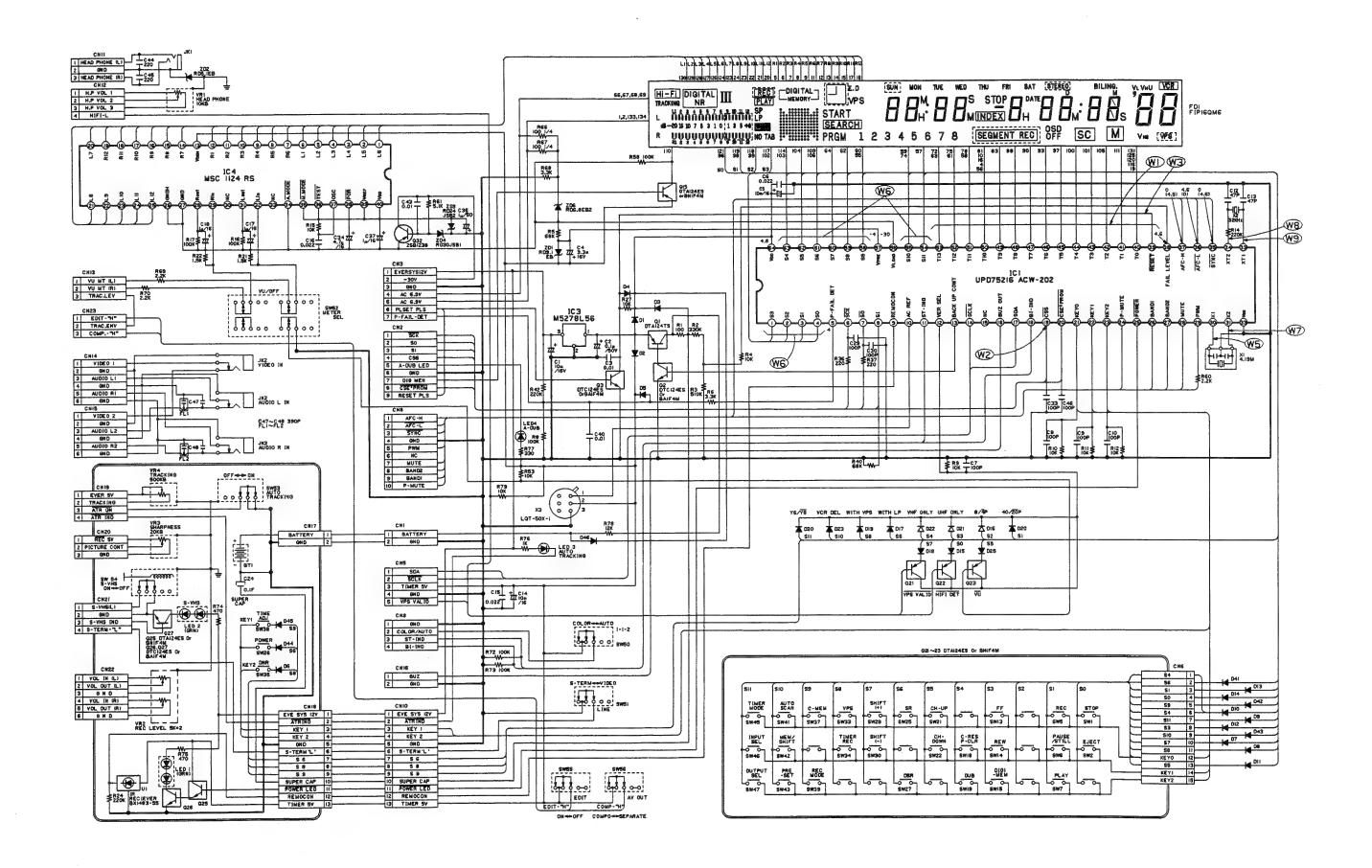




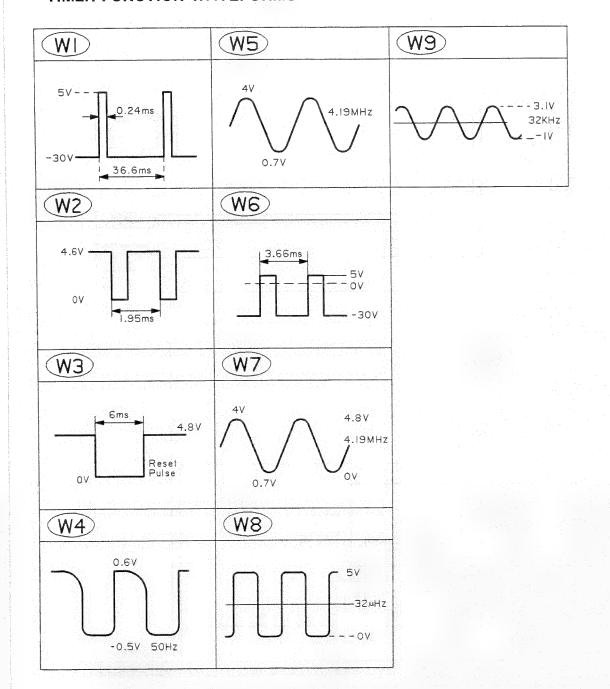


2-17. H.P/VIDEO SW CIRCUIT BOARD (SOLDER SIDE)

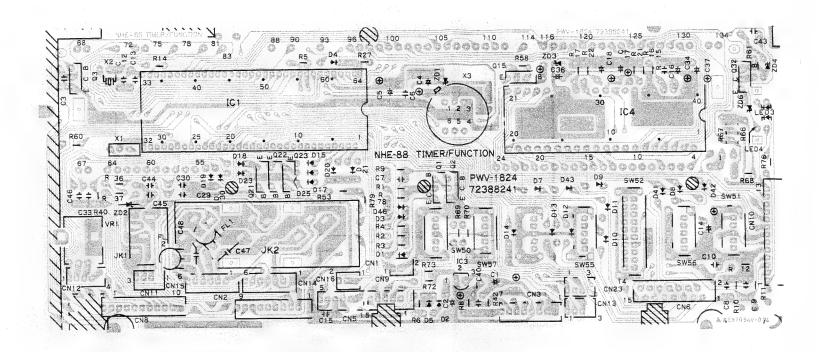


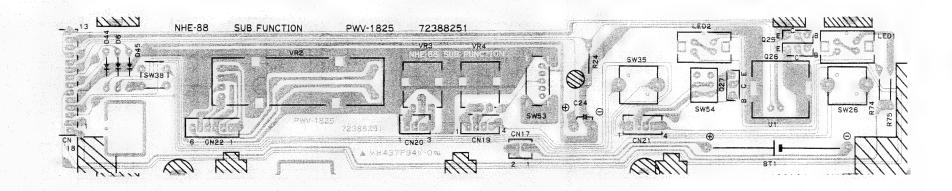


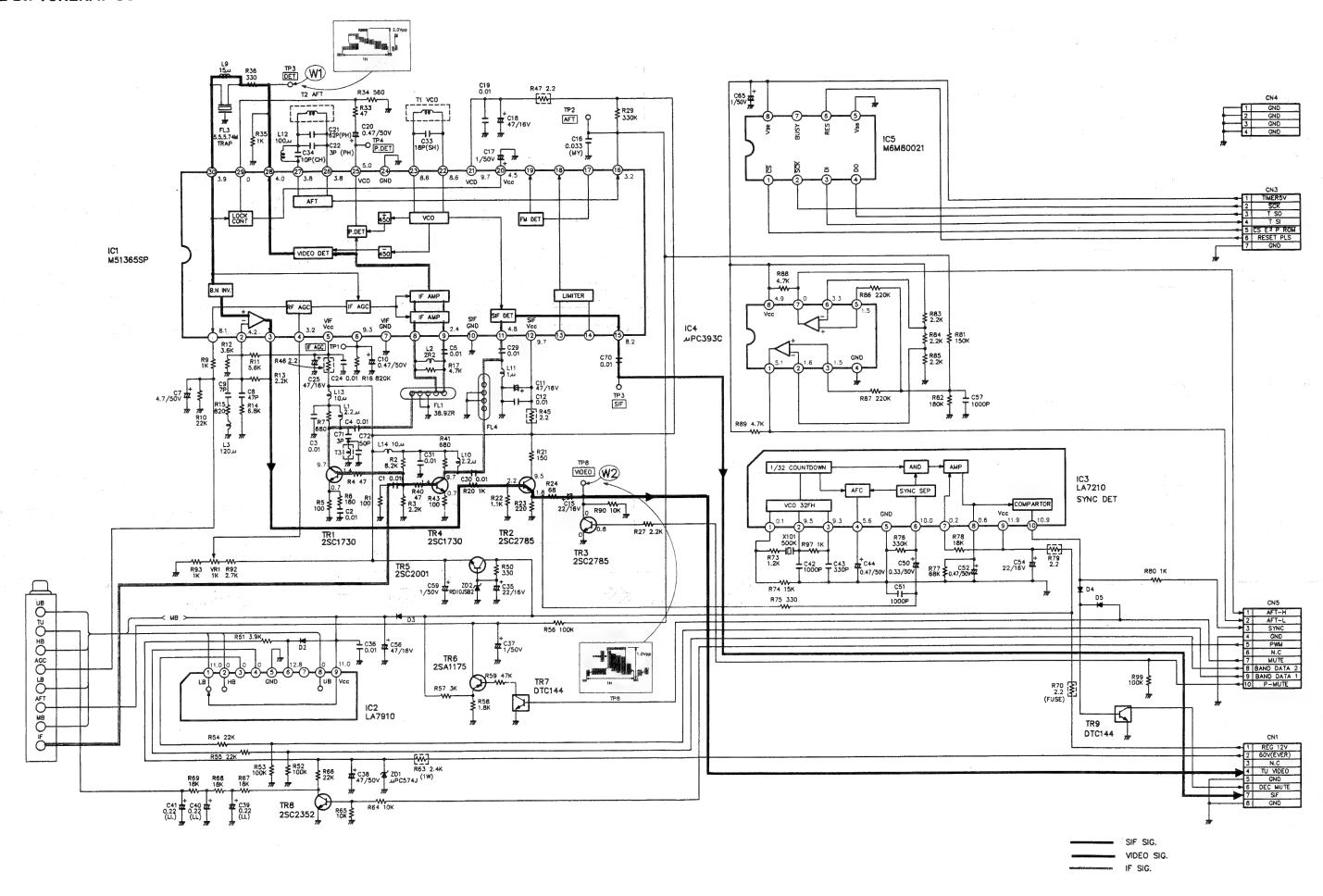
TIMER FUNCTION WAVEFORMS



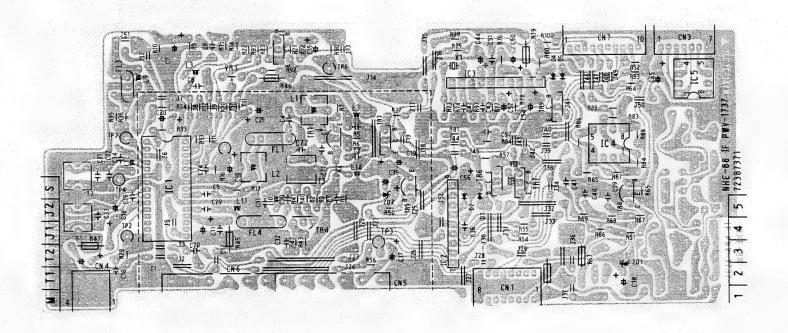
2-19. TIMER FUNCTION/SUB FUNCTION CIRCUIT BOARD (SOLDER SIDE)

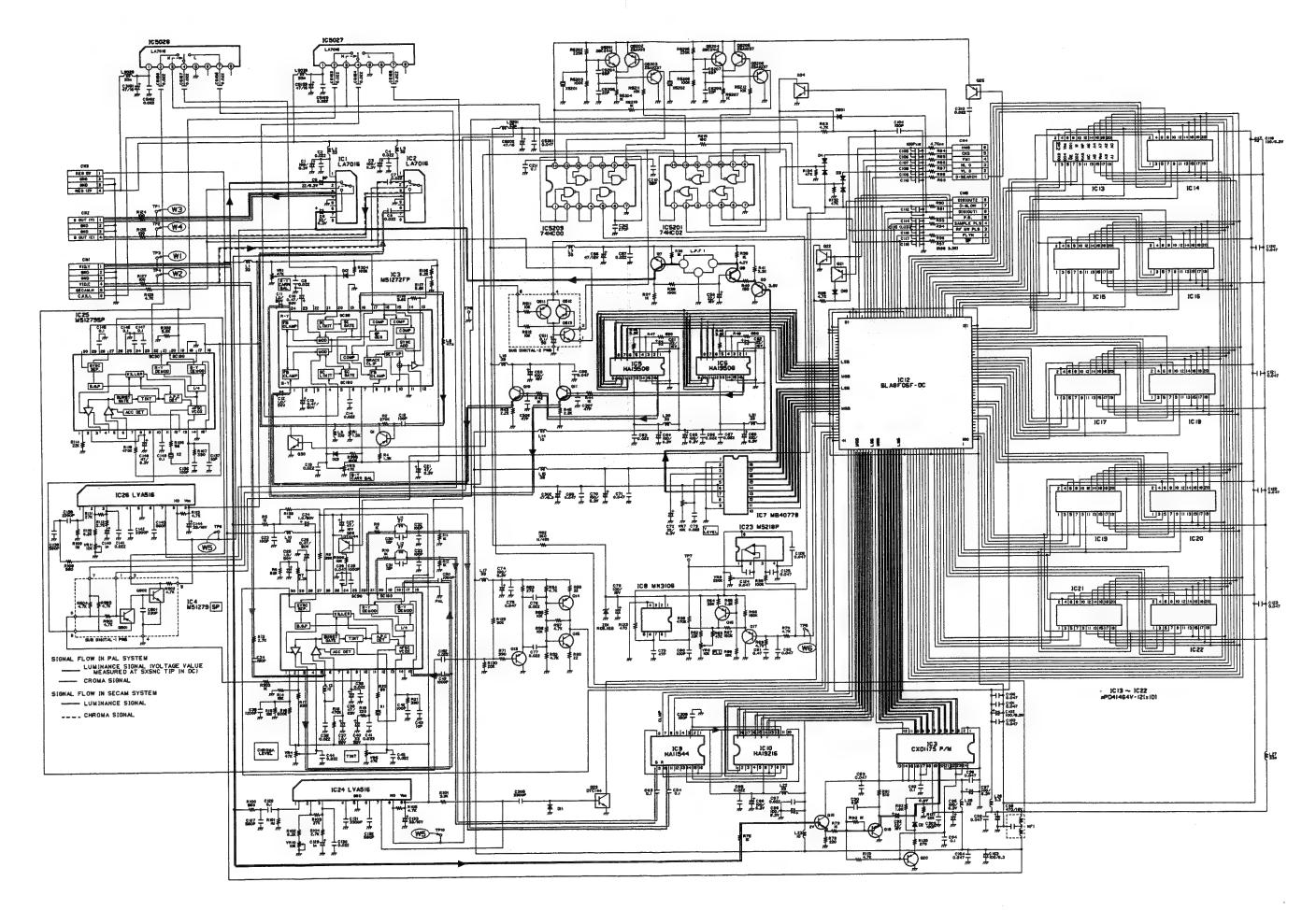






2-21. TUNER/IF CIRCUIT BOARD (SOLDER SIDE)

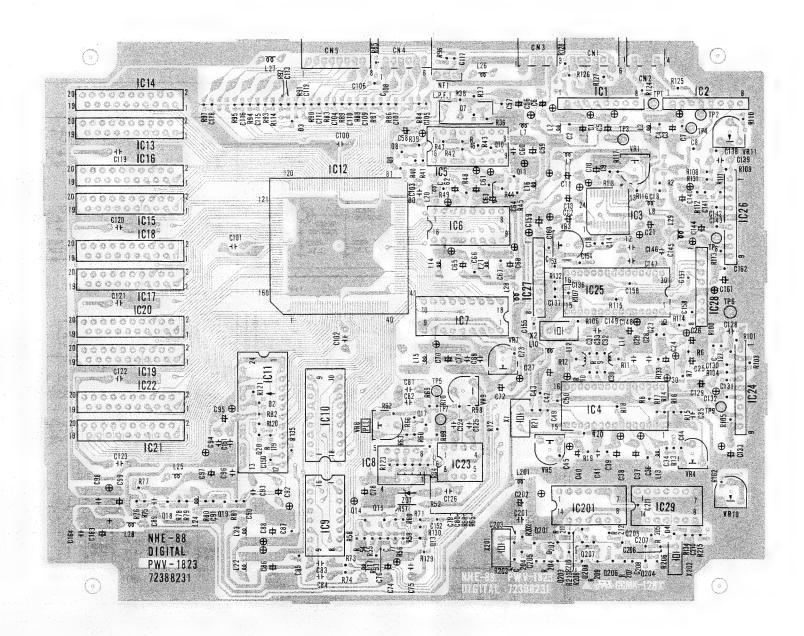




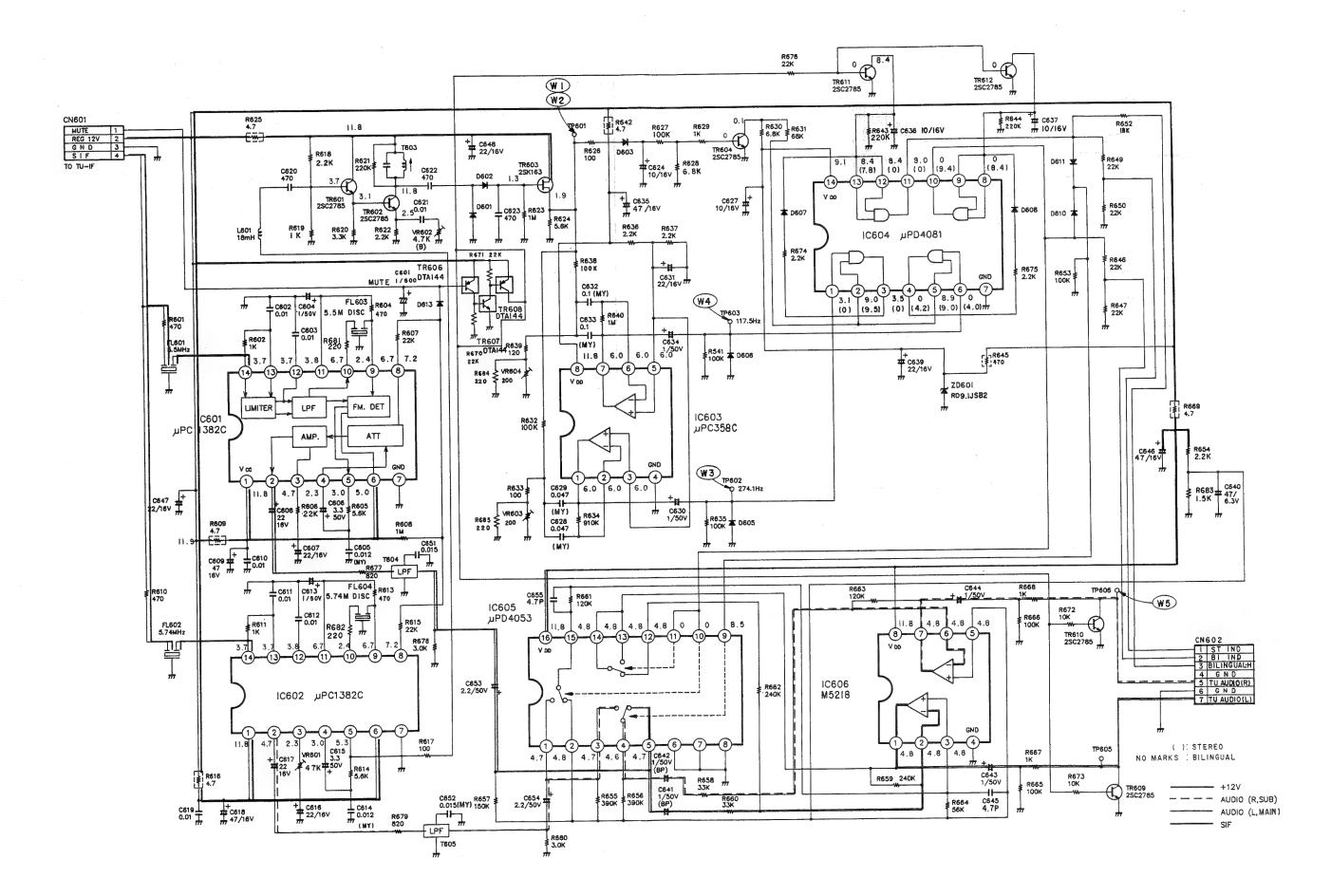
DIGITAL WAVEFORMS

WI CNI- ① Video Y TP3 W2 CNI- ④ Video C TP4 Burst O.6Vp-p 2.0Vp-p 4.8Vo-p 4.8Vo-

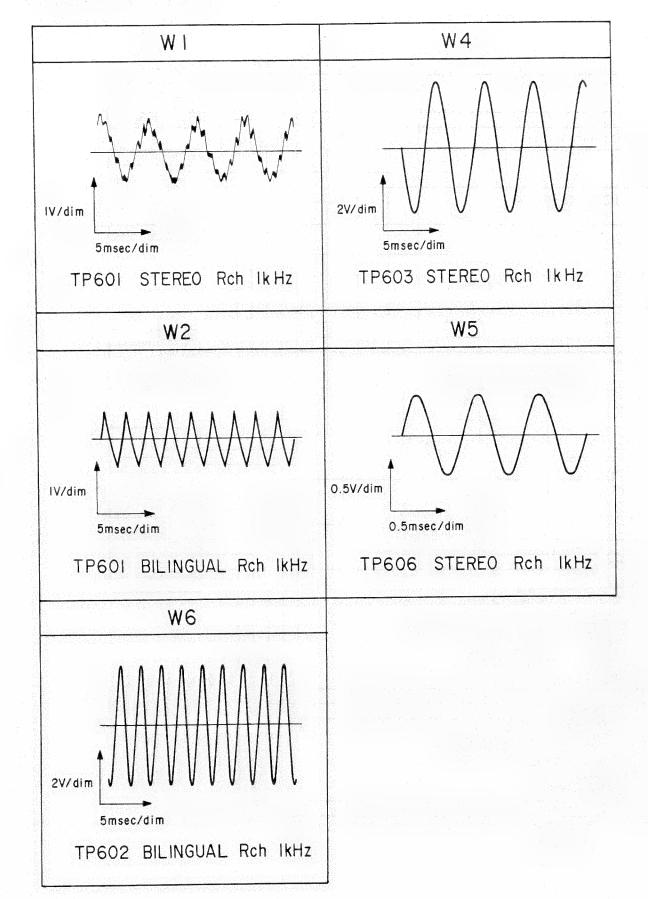
2-23. DIGITAL CIRCUIT BOARD (SOLDER SIDE)



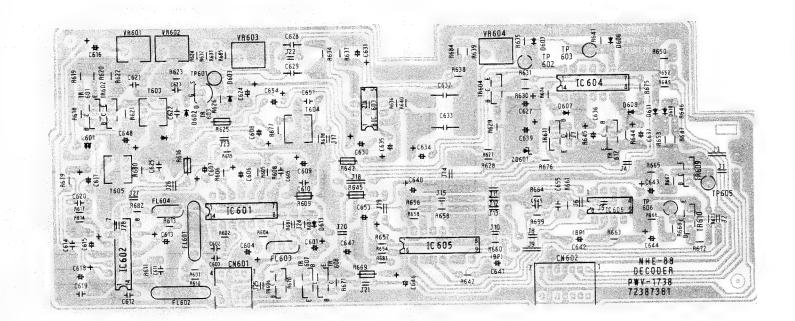
64#S (IH)

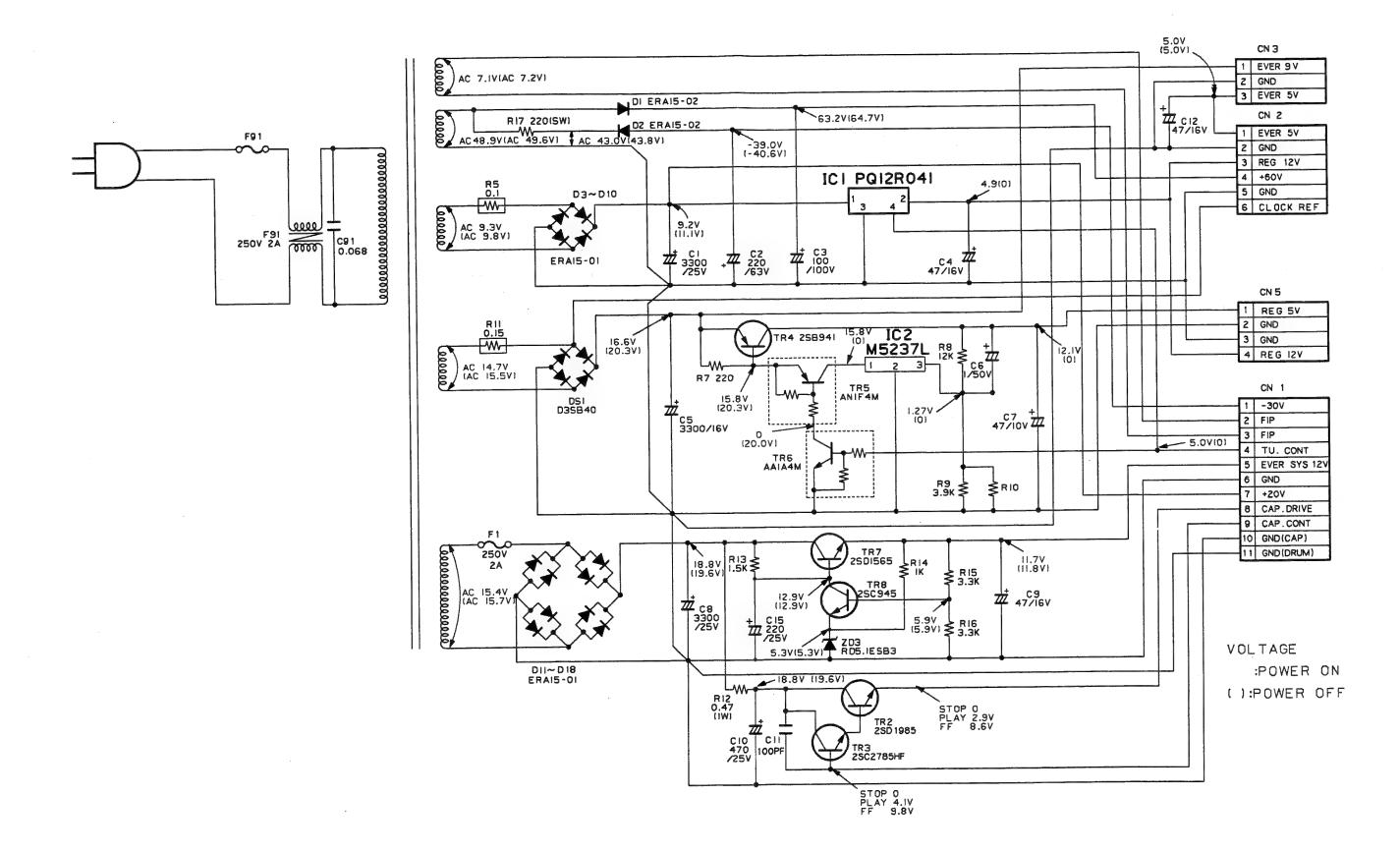


DECODER WAVEFORMS

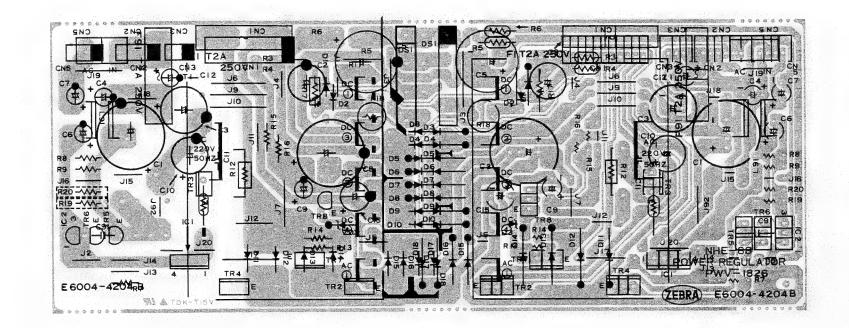


2-25. DECODER CIRCUIT BOARD (SOLDER SIDE)

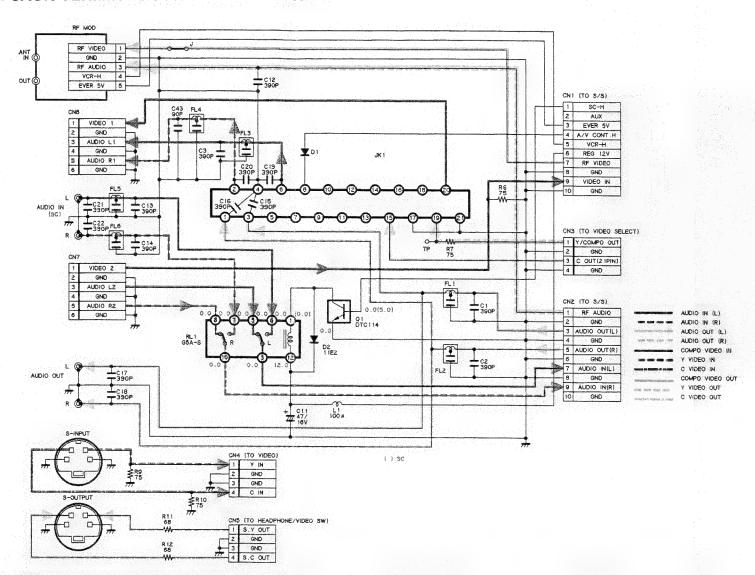




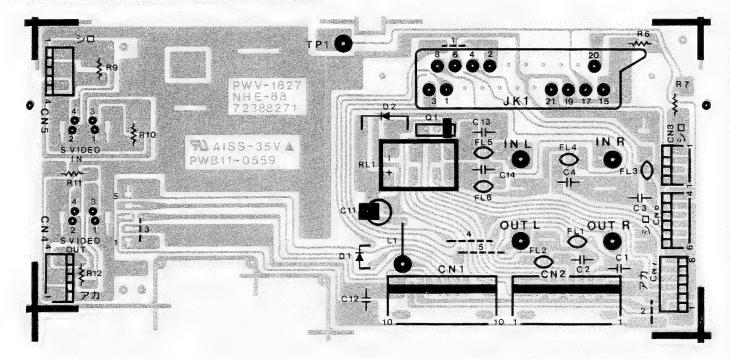
2-27. POWER/REGULATOR CIRCUIT BOARD (SOLDER SIDE)



2-28. JACK TERMINAL SCHEMATIC DIAGRAM

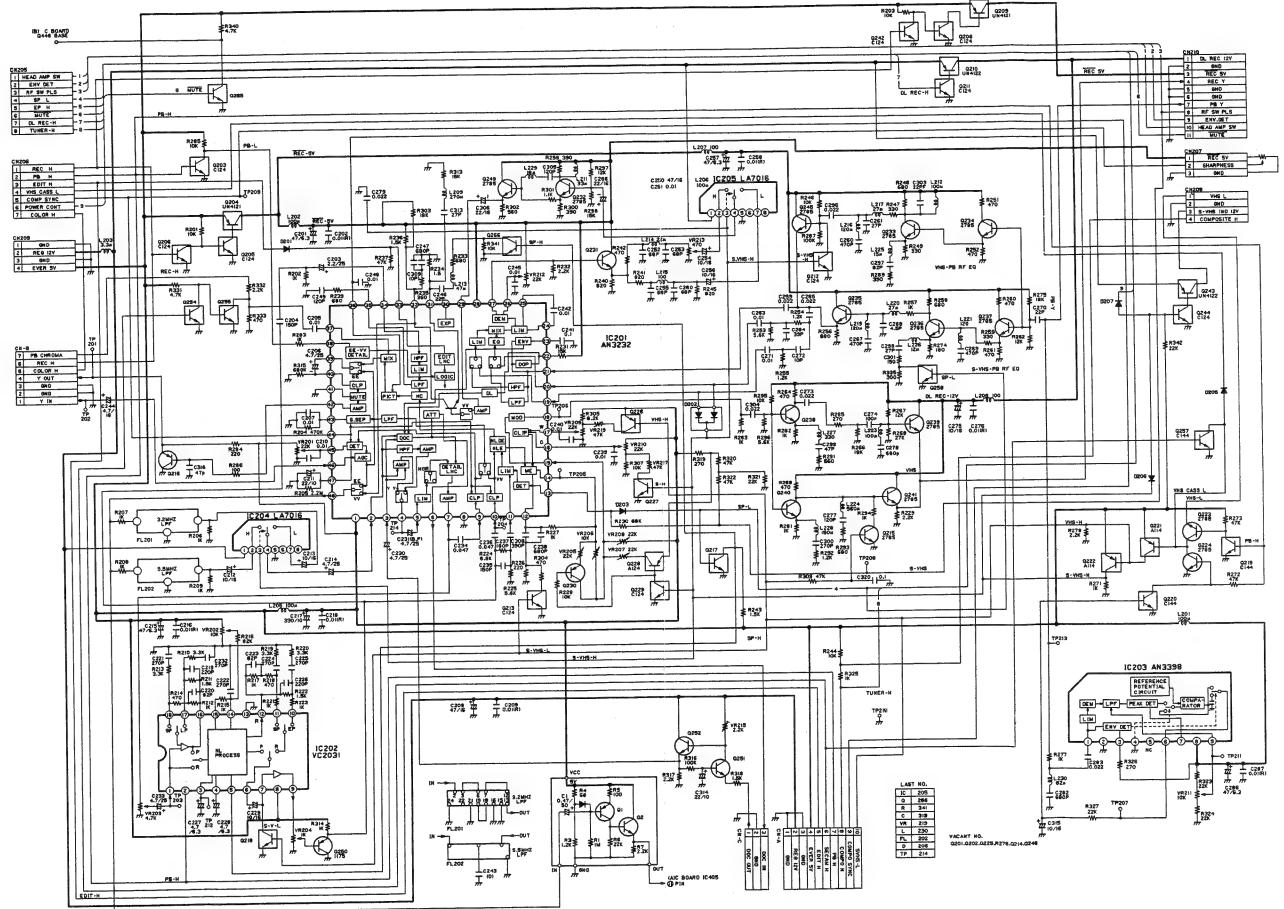


2-29. JACK TERMINAL CIRCUIT BOARD

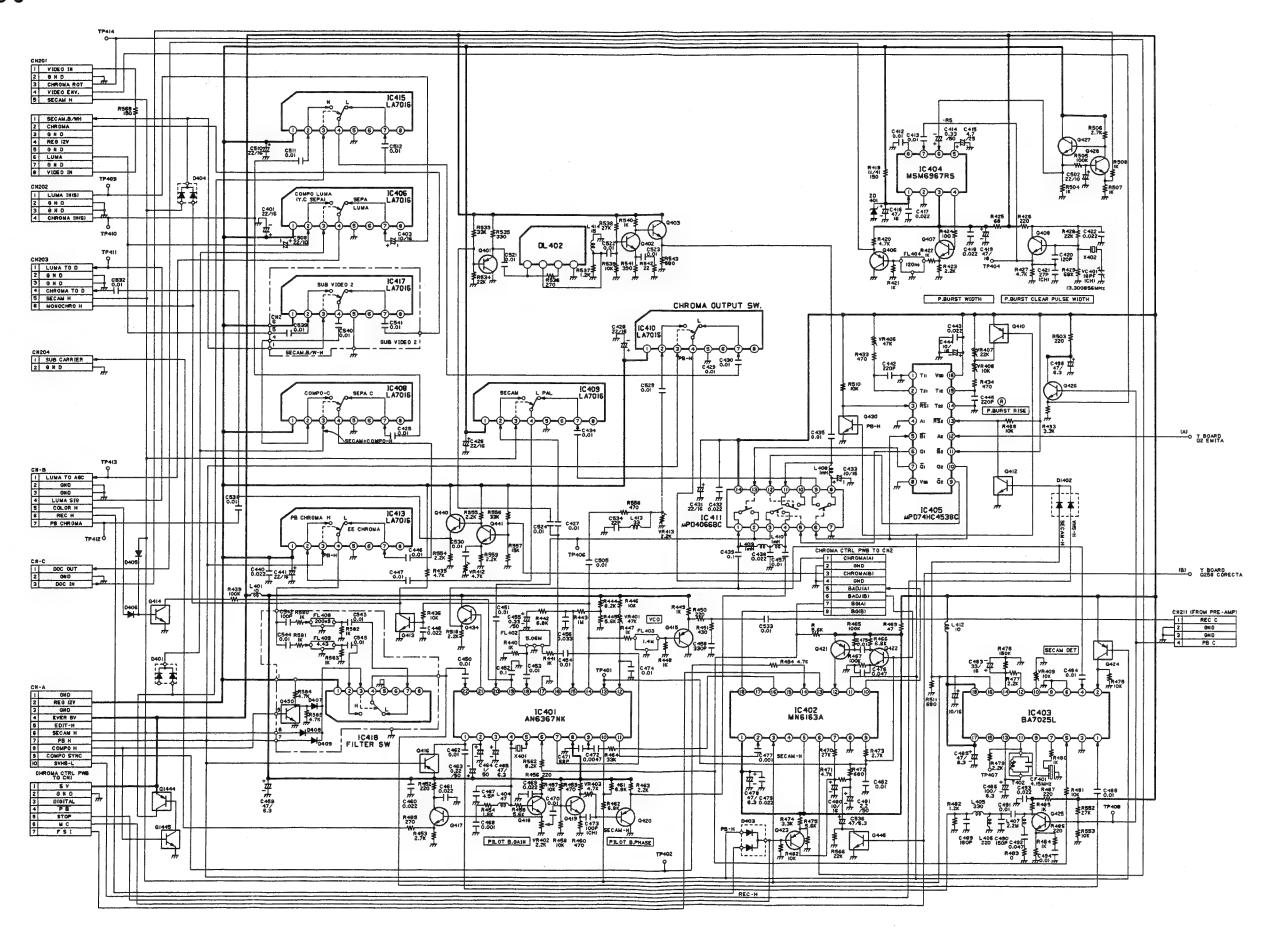


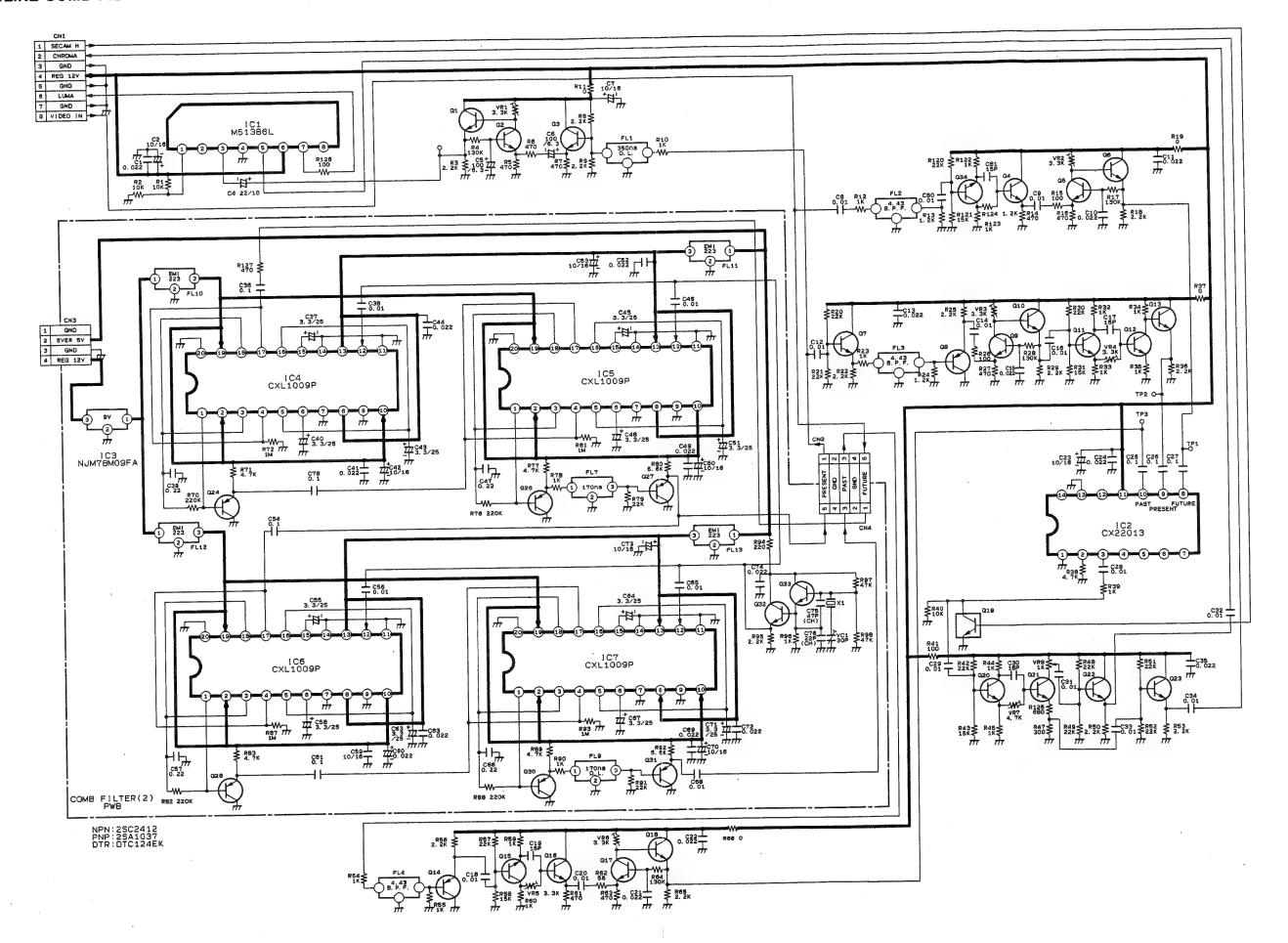
2-7. VIDEO SCHEMATIC DIAGRAM

VIDEO-Y



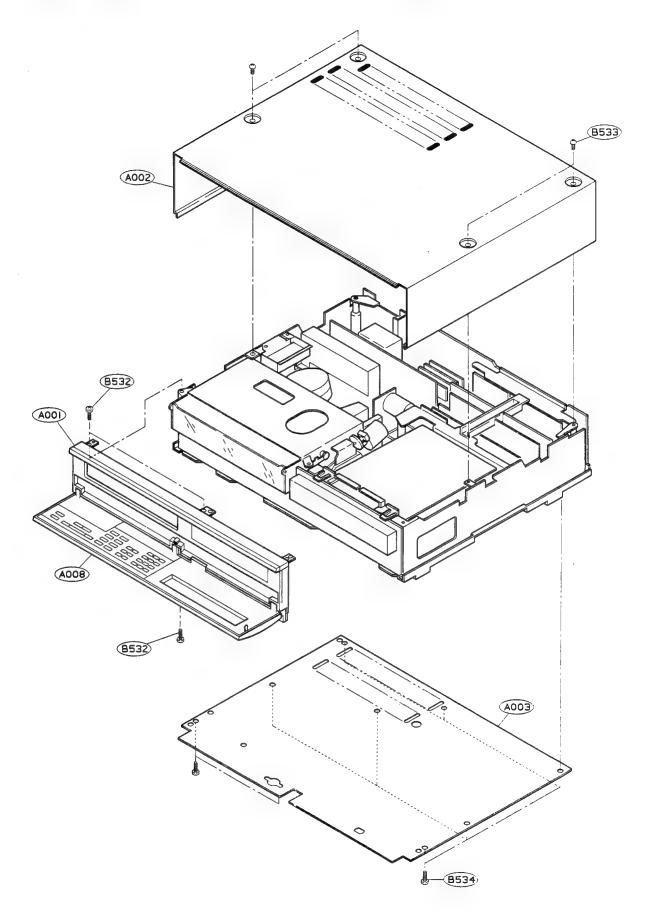
1

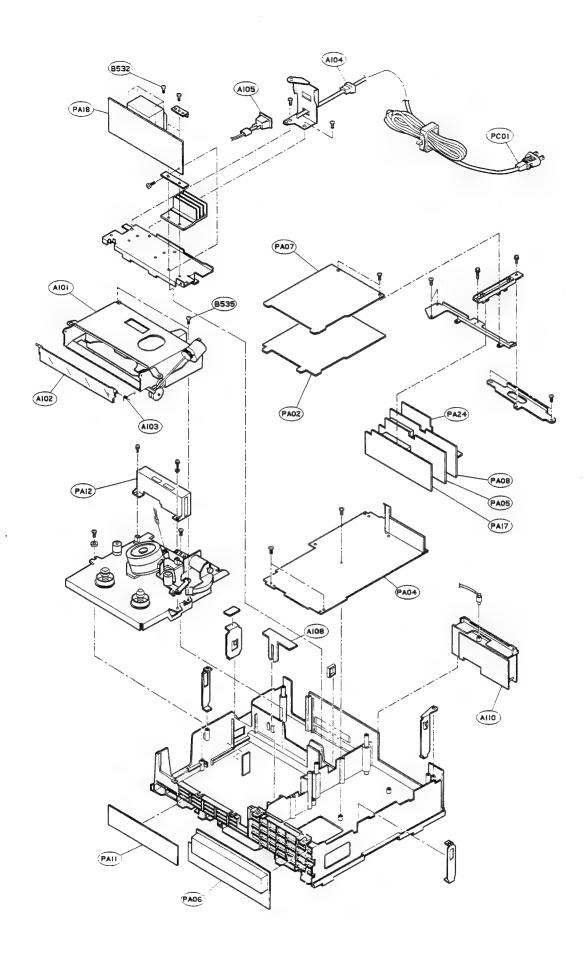




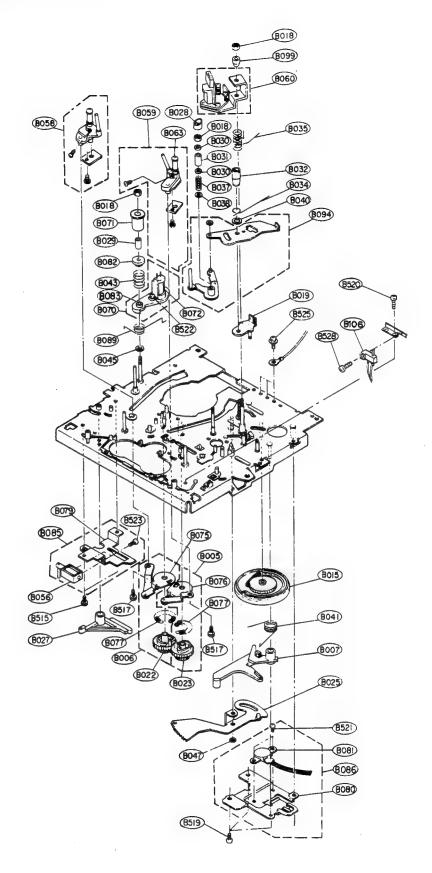
SECTION 5 EXPLODED VIEW

5-1. CABINET SECTION

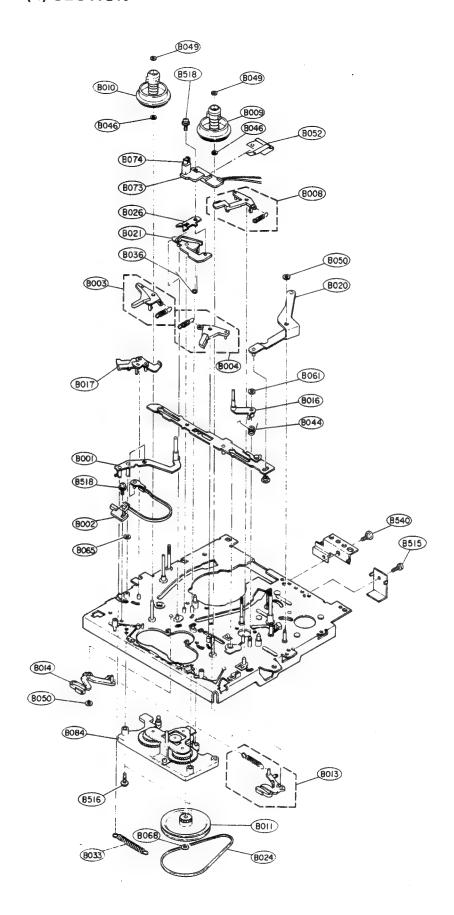




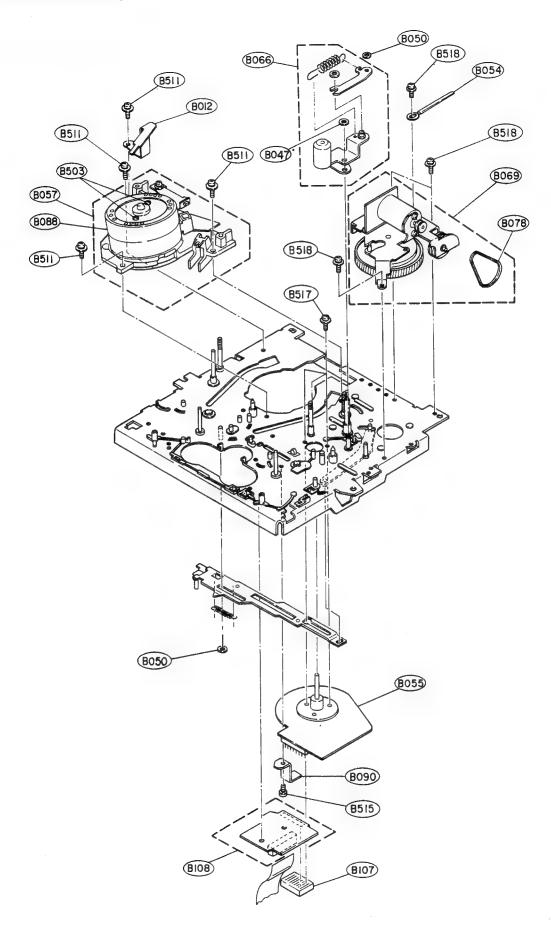
5-3. MECHANISM (I) SECTION



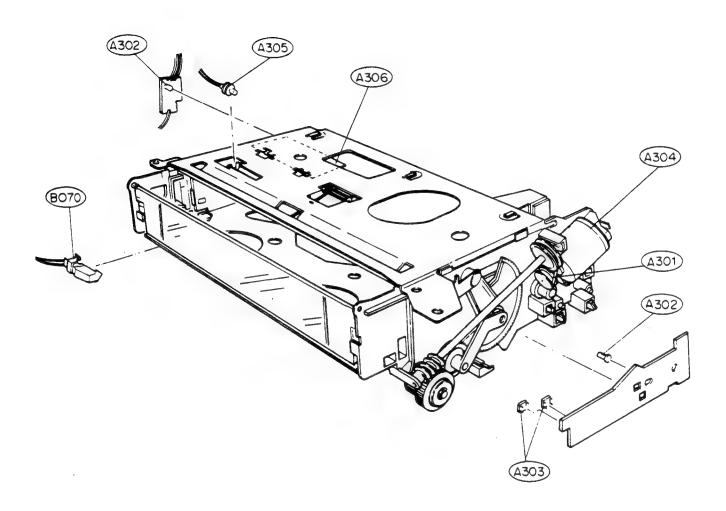
5-4. MECHANISM (II) SECTION



5-5. MECHANISM (III) SECTION



5-6. CASSETTE HOUSING SECTION



SECTION 6 REPLACEMENT PARTS LIST

VIDEO PWB ASSY 6-7 PRE AMP PBW ASSY 6-17 FLYING ERASE PWB ASSY 6-18 AUDIO PWB ASSY 6-20 H.P/VIDEO SW PWB ASSY 6-22 TIMER/FUNCTION PWB ASSY 6-24 SUB FUNCTION PWB ASSY 6-25 TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
FLYING ERASE PWB ASSY 6-18 AUDIO PWB ASSY 6-20 H.P/VIDEO SW PWB ASSY 6-22 TIMER/FUNCTION PWB ASSY 6-24 SUB FUNCTION PWB ASSY 6-25 TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
AUDIO PWB ASSY
H.P/VIDEO SW PWB ASSY 6-22 TIMER/FUNCTION PWB ASSY 6-24 SUB FUNCTION PWB ASSY 6-25 TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
TIMER/FUNCTION PWB ASSY 6-24 SUB FUNCTION PWB ASSY 6-25 TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
SUB FUNCTION PWB ASSY 6-25 TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
TUNER/IF PWB ASSY 6-26 DECODER PWB ASSY 6-29
DECODER PWB ASSY 6-29
DIGITAL PWB ASSY 6-31
EVER 5V TR MK-2 ASSY 6-37
JACK TERMINAL PWB ASSY 6-38
POWER REGULATOR PWB ASSY 6-38
OTHER SERVICE PARTS 6-39
CASSETTE HOUSING ASSY 6-42

REPLACEMENT PARTS WHICH HAVE SPECIAL SAFETY
CHARACTERISTICS ARE IDENTIFIED BY A SHADING ON THE SCHEMATICS.
REPLACE THESE CRITICAL COMPONENTS WITH RECOMMENDED
REPLACEMENT PARTS.
DON'T DEGRADE THE SAFETY OF THE SET THROUGH
IMPROPER SERVING.

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SYMBOL	PARTS NO	DESCRIPTION	QTY
*** IC	S ***		
IC1101 IC1102 IC1103 IC1104 IC1601	37151536 37151334 371E1514 37151350 37151482	MOS UPD75108CW-297 IC BA6246 IC PST529D-2-T VOLTAGE DE IC M50782SP(I/O EXPANDER) MOS BU2726S	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C1602 C1603 C1604 C1605 C1607	37901081 37101349 37101117 37151371 37151371	IC M5218 L(SIP) IC BA6993N IC UPC324C MOS BU4066BL MOS BU4066BL	1 1
C1608 C1609 C1610 C1612 C1614	37151408 37101159 37101369 37151481 37151499	MOS BU4011BL LA7016 ANALOG SW IC UPC78N05H MOS BU3765AS VISS VASS MOS M50927-203SP (ATR)	1 1 1 1
101871	37151477	IC SDA5642 (VPS DECODER)	1
*** TR/	ANSISTORS *	**	
Q1101 Q1102 Q1103 Q1105 Q1106	355D2717 35543418 35562518 355D2715 355D2715	TR,BA1L4M TR,2SC1741A(R) TR,2SD1227M R TR,BA1A4M(C,10K)AT TR,BA1A4M(C,10K)AT	1 1 1 1 1 1
Q157.1 Q1572 Q1573 Q1574 Q1601	355D1931 355D1931 355D1931 355D1931 355D2717	TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,BA1L4M	1 1 1 1 1
Q1602 Q1603 Q1604 Q1605 Q1606	355D2717 355D2717 355D2717 355D2717 355D2717	TR,BA1L4M TR,BA1L4M TR,BA1L4M TR,BA1L4M TR,BA1L4M	1 1 1 1 1
Q1607 Q1608 Q1609 Q1610 Q1611	355D2717 355D2717 355D1931 355D2717 355K1131	TR,BA1L4M TR,BA1L4M TR,2SC2785(E,F,H,J)AT TR,BA1L4M TR,2SA1175 (E,F,H,J)	1 1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1612 Q1613 Q1614 Q1615 Q1616	355K2111 355D2717 355K2111 355K2109 355K1131	TR.BN1L4M(A.47K)AT TR.BA1L4M TR.BN1L4M(A.47K)AT TR.BN1A4M (A.10K)AT TR.2SA1175 (E.F.H.J)	1 1 1 1 1 1 1 1 1
Q1617 Q1618 Q1619 Q1620 Q1621	355D1931 355D2717 355D2717 355D2717 355D2710	TR,2SC2785(E,F,H,J)AT TR,BA1L4M TR,BA1L4M TR,BA1L4M DTC124ES,AT	1 1 1 1 1
Q1771	355K2113	DTR UN4122(PNP 4.7K),AT	1 1 1 1
Q1772	355D2711	DTC144ES,AT	
Q1774	355K2111	TR,BN1L4M(A,47K)AT	
Q1775	355K2113	DTR UN4122(PNP 4.7K),AT	
Q1776	355D2717	TR,BAIL4M	
Q1777	355D2711	DTC144ES,AT	1 1
Q1901	355K1131	TR,2SA1175 (E,F,H,J)	
Q1902	355K1131	TR,2SA1175 (E,F,H,J)	
*** DIC	DES ***		
D1101	360KA025	DIODE 1SS133	1 1
D1102	360KA025	DIODE 1SS133	
D1103	369KB107	DIODE 11E2TA1	
D1104	369KB107	DIODE 11E2TA1	
D1601	360KA025	DIODE 1SS133	
D1602 D1603 D1604 D1605 D1606	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE ISS133 DIODE ISS133 DIODE ISS133 DIODE ISS133 DIODE ISS133	1 1
D1607	360KA025	DIODE 1SS133	1 1 1 1 1
D1608	360KA025	DIODE 1SS133	
D1609	360KA025	DIODE 1SS133	
D1610	360KA025	DIODE 1SS133	
D1611	360KA025	DIODE 1SS133	
D1612	360KA025	DIODE ISS133	1
D1613	360KA025	DIODE ISS133	1
D1614	360KA025	DIODE ISS133	1
D1615	360KA025	DIODE ISS133	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
3 TWIDOE	TANTO NO	DESCRIPTION	
D1616	360KA025	DIODE 1SS133	1
D1617 D1618 D1619 D1620 D1621	360KA025 360KA025 360KA009 360KA025 360KA009	DIODE 1SS133 DIODE 1SS133 DIODE 1S2473 AT26 DIODE 1SS133 DIODE 1S2473 AT26	1 1 1 1
D1622 D1623 D1625 D1626 D1627	360KA009 360KA025 360KA009 360KA009 360KA025	DIODE 1S2473 AT26 DIODE 1SS133 DIODE 1S2473 AT26 DIODE 1S2473 AT26 DIODE 1SS133	1 1 1 1
D1628 D1629 D1630 D1631 D1632	360KA009 360KA009 360KA025 360KA025 360KA025	DIODE 1S2473 AT26 DIODE 1S2473 AT26 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1 1 1
D1633 D1634 D1639 D1639 D1640	360KA025 360KA025 360KA025 360KC972 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE MA165 AT26 DIODE 1SS133	1 1
D1641 D1771 D1772 D1773 ZD1101	360KA025 360KA025 360KA025 360KA025 369KE177	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 ZENER DIODE RD8.2EB3,AT26	1 1 1 1
*** VAF	RIABLE RESISTO	DRS ***	
VR1601 VR1602 VR1603 VR1604	41951154 41951154 41951157 41951157	R, VARIABLE 100K, B R, VARIABLE 100K, B R, VARIABLE 330K, B R, VARIABLE 330K, B	1 1 1
*** COI	LS & FILTERS	***	
FL1901 L1571 L1572 L1573 L1901	61828034 610G1529 610G1521 610G1520 610G1529	4.43MHZ CHROMA DL EQ(RF) FILTER COIL 100UH AT (S) FILTER COIL 22UH AT (S) FILTER COIL 18UH AT(S) FILTER COIL 100UH AT (S)	1
X1601	61919078	CERALOCK 4MHZ	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ELE	CTRICAL PARTS	& MISCELLANE OUS PARTS	***
BZ1771	63099017	PIEZO BUZZER KBS-20B-6P	1 1 1 1 1 1
RM1101	39906128	RBLOCK100K*5 1.8MM 1/16W	
RM1102	39901055	R BLOCK1.0K*6 1.8MM 1/16W	
RM1103	39906131	RBLOCK100K*8 1.8MM 1/16W	
X1101	39080023	4.19MHZ RESONATOR	
X1602	39080031	CERAMIC RESONATOR 3.34MHZ	1
*** RES	ISTORS ***		
R1101	409HB661	R.CARBON 330H 5% 1/4W	1
R1102	40912161	R.CARBON 330H 5% 1/2W	1
R1103	40351109	R.METAL 2.2H 5% 1W	1
R1104	401KE721	R.CARBON 100K 5% 1/6W	1
R1106	409HB714	R.CARBON 51K 5% 1/4W	1
R1107	401KE714	R,CARBON 51K 5% 1/6W	1 1 1 1 1 1 1 1 1 1
R1108	401KE685	R,CARBON 3.3K 5% 1/6W	
R1109	401KE721	R,CARBON 100K 5% 1/6W	
R1111	401KE721	R,CARBON 100K 5% 1/6W	
R1112	401KE721	R,CARBON 100K 5% 1/6W	
R1115	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1116	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1117	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1118	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1119	401KE721	R,CARBON 100K 5% 1/6W	1
R1120	401KE721	R.CARBON 100K 5% 1/6W	1 1
R1121	401KE697	R.CARBON 10K 5% 1/6W	
R1122	401KE697	R.CARBON 10K 5% 1/6W	
R1123	401KE697	R.CARBON 10K 5% 1/6W	
R1124	401KE697	R.CARBON 10K 5% 1/6W	
R1128	401KE697	R,CARBON 10K 5% 1/6W	1 1 1
R1132	401KE685	R,CARBON 3.3K 5% 1/6W	
R1133	401KE657	R,CARBON 220H 5% 1/6W	
R1134	401KE657	R,CARBON 220H 5% 1/6W	
R1135	401KE657	R,CARBON 220H 5% 1/6W	
R1136 R1137 R1138 R1139 R1140	401KE685 401KE685 401KE685 401KE685 401KE685	R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W	1 1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYI
R1141 R1142 R1143 R1144 R1145	401KE685 401KE685 401KE685 401KE685 401KE685	R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 3.3K 5% 1/6W	1 1 1 1 1 1	R1 R1 R1 R1
R1146 R1147 R1148 R1149 R1150	401KE685 401KE685 401KE685 401KE685 401KE685	R.CARBON 3.3K 5% 1/6W R.CARBON 3.3K 5% 1/6W R.CARBON 3.3K 5% 1/6W R.CARBON 3.3K 5% 1/6W R.CARBON 3.3K 5% 1/6W	1 1	R10 R10 R10 R10 R10 R10
R1151 R1152 R1161 R1162 R1163	409HB697 409HB697 401KE721 401KE721 401KE673	R,CARBON 10K 5% 1/4W R,CARBON 10K 5% 1/4W R,CARBON 100K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 1.0K 5% 1/6W	1 1 1 1 1 1 1	R10 R10 R10 R10
R1165 R1169 R1571 R1572 R1573	401KE685 401KE673 401KE707 401KE695 401KE677	R,CARBON 3.3K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 27K 5% 1/6W R,CARBON 8.2K 5% 1/6W R,CARBON 1.5K 5% 1/6W	1 1 1 1	R10 R10 R10 R10 R10
R1574 R1575 R1576 R1577 R1578	401KE673 401KE675 401KE739 401KE681 401KE695	R,CARBON 1.0K 5% 1/6W R,CARBON 1.2K 5% 1/6W R,CARBON 560K 5% 1/6W R,CARBON 2.2K 5% 1/6W R,CARBON 8.2K 5% 1/6W	1 1 1 1 1	R10 R10 R10 R10
R1579 R1580 R1581 R1582 R1583	401KE681 401KE667 401KE649 401KE713 401KE693	R,CARBON 2.2K 5% 1/6W R,CARBON 560H 5% 1/6W R,CARBON 100H 5% 1/6W R,CARBON 47K 5% 1/6W R,CARBON 6.8K 5% 1/6W	1 1 1	R16 R16 R16 R16
R1584 R1585 R1601 R1602 R1603	401KE697 401KE641 401KE729 401KE717 401KE693	R,CARBON 10K 5% 1/6W R,CARBON 47H 5% 1/6W R,CARBON 220K 5% 1/6W R,CARBON 68K 5% 1/6W R,CARBON 6.8K 5% 1/6W	1	R16 R16 R16 R16
R1604 R1605 R1606 R1607	409HB761 401KE728 401KE732 401KE735	R,CARBON 4.7M 5% 1/4W R,CARBON 200K 5% 1/6W R,CARBON 300K 5% 1/6W R,CARBON 390K 5% 1/6W	1 1	R16 R16

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1608	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1609	409HB761	R,CARBON 4.7M 5% 1/4W	1 1 1
R1610	401KE732	R,CARBON 300K 5% 1/6W	
R1611	401KE717	R,CARBON 68K 5% 1/6W	
R1612	401KE719	R,CARBON 82K 5% 1/6W	
R1613	401KE705	R,CARBON 22K 5% 1/6W	
R1614	401KE693	R,CARBON 6.8K 5% 1/6W	1 1 1
R1615	401KE670	R,CARBON 750H 5% 1/6W	
R1616	401KE671	R,CARBON 820H 5% 1/6W	
R1617	401KE685	R,CARBON 3.3K 5% 1/6W	
R1618	401KE685	R,CARBON 3.3K 5% 1/6W	
R1619	401KE689	R,CARBON 4.7K 5% 1/6W	1 1 1 1
R1620	401KE693	R,CARBON 6.8K 5% 1/6W	
R1621	401KE745	R,CARBON 1.0M 5% 1/6W	
R1623	401KE689	R,CARBON 4.7K 5% 1/6W	
R1624	401KE677	R,CARBON 1.5K 5% 1/6W	
R1625	401KE687	R,CARBON 3.9K 5% 1/6W	1 1 1
R1626	401KE703	R,CARBON 18K 5% 1/6W	
R1627	401KE715	R,CARBON 56K 5% 1/6W	
R1628	401KE721	R,CARBON 100K 5% 1/6W	
R1629	409HB751	R,CARBON 1.8M 5% 1/4W	
R1630	401KE699	R,CARBON 12K 5% 1/6W	1
R1631	401KE699	R,CARBON 12K 5% 1/6W	
R1632	401KE673	R,CARBON 1.0K 5% 1/6W	
R1633	401KE721	R,CARBON 100K 5% 1/6W	
R1634	401KE661	R,CARBON 330H 5% 1/6W	
R1635	401KE745	R,CARBON 1.0M 5% 1/6W	1 1 1 1 1 1
R1636	401KE715	R,CARBON 56K 5% 1/6W	
R1637	401KE703	R,CARBON 18K 5% 1/6W	
R1638	401KE677	R,CARBON 1.5K 5% 1/6W	
R1639	401KE729	R,CARBON 220K 5% 1/6W	
R1640	401KE697	R,CARBON 10K 5% 1/6W	1
R1641	401KE697	R,CARBON 10K 5% 1/6W	1
R1642	401KE745	R,CARBON 1.0M 5% 1/6W	1
R1643	401KE685	R,CARBON 3.3K 5% 1/6W	1
R1644	401KE699	R,CARBON 12K 5% 1/6W	1
R1647	401KE689	R,CARBON 4.7K 5% 1/6W	1
R1648	401KE661	R,CARBON 330H 5% 1/6W	1
R1649	401KE721	R,CARBON 100K 5% 1/6W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1651	401KE693	R,CARBON 6.8K 5% 1/6W	1
R1652	409HB691	R,CARBON 5.6K 5% 1/4W	
R1653	401KE725	R,CARBON 150K 5% 1/6W	1 1
R1654	409HB714	R,CARBON 51K 5% 1/4W	
R1655	401KE725	R,CARBON 150K 5% 1/6W	
R1656	409HB714	R,CARBON 51K 5% 1/4W	
R1657	401KE697	R,CARBON 10K 5% 1/6W	
R1658	401KE721	R,CARBON 100K 5% 1/6W	1 1 1 1 1
R1659	401KE691	R,CARBON 5.6K 5% 1/6W	
R1660	401KE689	R,CARBON 4.7K 5% 1/6W	
R1661	401KE729	R,CARBON 220K 5% 1/6W	
R1662	401KE731	R,CARBON 270K 5% 1/6W	
R1663	401KE737	R,CARBON 470K 5% 1/6W	1
R1664	401KE713	R,CARBON 47K 5% 1/6W	
R1665	401KE713	R,CARBON 47K 5% 1/6W	
R1666	401KE721	R,CARBON 100K 5% 1/6W	
R1667	401KE709	R,CARBON 33K 5% 1/6W	
R1668	401KE689	R,CARBON 4.7K 5% 1/6W	1 1
R1669	401KE697	R,CARBON 10K 5% 1/6W	
R1670	401KE697	R,CARBON 10K 5% 1/6W	
R1671	401KE673	R,CARBON 1.0K 5% 1/6W	
R1672	401KE645	R,CARBON 68H 5% 1/6W	
R1673	401KE685	R,CARBON 3.3K 5% 1/6W	1 1 1 1 1 1
R1674	401KE649	R,CARBON 100H 5% 1/6W	
R1675	401KE705	R,CARBON 22K 5% 1/6W	
R1676	409HB649	R,CARBON 100H 5% 1/4W	
R1677	401KE709	R,CARBON 33K 5% 1/6W	
R1678	401KE695	R,CARBON 8.2K 5% 1/6W	1 1 1 1 1 1 1
R1679	401KE679	R,CARBON 1.8K 5% 1/6W	
R1680	401KE657	R,CARBON 220H 5% 1/6W	
R1681	401KE715	R,CARBON 56K 5% 1/6W	
R1682	401KE695	R,CARBON 8.2K 5% 1/6W	
R1683	401KE707	R,CARBON 27K 5% 1/6W	1 1 1
R1684	401KE707	R,CARBON 27K 5% 1/6W	
R1685	401KE697	R,CARBON 10K 5% 1/6W	
R1686	401KE697	R,CARBON 10K 5% 1/6W	
R1687	401KE697	R,CARBON 10K 5% 1/6W	
R1688	401KE695	R.CARBON 8.2K 5% 1/6W	1
R1689	401KE713	R.CARBON 47K 5% 1/6W	

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1690 R1691 R1692	401KE739 401KE695 401KE679	R,CARBON 560K 5% 1/6W R,CARBON 8.2K 5% 1/6W R,CARBON 1.8K 5% 1/6W	1 1 1
R1693 R1694 R1695 R1696 R1697	401KE711 401KE737 401KE745 401KE739 401KE673	R,CARBON 39K 5% 1/6W R,CARBON 470K 5% 1/6W R,CARBON 1.0M 5% 1/6W R,CARBON 560K 5% 1/6W R,CARBON 1.0K 5% 1/6W	1 1 1 1
R1698 R1699 R1700 R1701 R1702	401KE745 401KE683 401KE682 401KE679 401KE687	R,CARBON 1.0M 5% 1/6W R,CARBON 2.7K 5% 1/6W R,CARBON 2.4K 5% 1/6W R,CARBON 1.8K 5% 1/6W R,CARBON 3.9K 5% 1/6W	1 1 1 1
R1703 R1704 R1705 R1708 R1709	401KE697 409HB689 409HB705 401KE689 401KE685	R,CARBON 10K 5% 1/6W R,CARBON 4.7K 5% 1/4W R,CARBON 22K 5% 1/4W R,CARBON 4.7K 5% 1/6W R,CARBON 3.3K 5% 1/6W	1 1 1 1
R1712 R1713 R1714 R1715 R1716	401KE701 401KE697 401KE689 401KE697 401KE697	R,CARBON 15K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W	1 1 1
R1717 R1772 R1773 R1774 R1775	401KE721 401KE721 401KE697 409HB649 401KE697	R,CARBON 100K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 100H 5% 1/4W R,CARBON 10K 5% 1/6W	1 1 1 1
R1776 R1871 R1872 R1873 R1874	409HB713 401KE649 401KE743 401KE691 401KE721	R,CARBON 47K 5% 1/4W R,CARBON 100H 5% 1/6W R,CARBON 820K 5% 1/6W R,CARBON 5.6K 5% 1/6W R,CARBON 100K 5% 1/6W	1 1 1 1
R1875 R1876 R1877 R1879 R1880	401KE743 401KE745 401KE680 401KE697 401KE697	R,CARBON 820K 5% 1/6W R,CARBON 1.0M 5% 1/6W R,CARBON 2.0K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W	1 1 1 1
R1881	401KE691	R,CARBON 5.6K 5% 1/6W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R1901	401KE673	R,CARBON 1.0K 5% 1/6W	1 1 1
R1902	401KE673	R,CARBON 1.0K 5% 1/6W	
R1903	401KE673	R,CARBON 1.0K 5% 1/6W	
R1904	401KE673	R,CARBON 1.0K 5% 1/6W	
*** CA	PACITORS **	*	
C1101 C1102 C1103 C1104 C1105	421CB461 430A8113 421CB461 421CB461 421CB461	C,CERAMIC 16V 0.01UF C,ELEC 16V 100UF C,CERAMIC 16V 0.01UF C,CERAMIC 16V 0.01UF C,CERAMIC 16V 0.01UF	1 1 1 1
C1106	429C0333	C,CERAMIC 25V 0.047UF	1 1 1 1 1
C1108	430A8104	C,ELEC 6.3V 100UF	
C1109	421CB461	C,CERAMIC 16V 0.01UF	
C1110	421CB863	C,CERAMIC 25V 0.022UF	
C1571	430A8103	C,ELEC 6.3V 47UF	
C1572	421CB461	C,CERAMIC 16V 0.01UF	1 1 1 1 1 1 1
C1573	421CB025	C,CERAMIC 50V 33 PF	
C1574	421CB040	C,CERAMIC 50V 180PF	
C1575	421CB033	C,CERAMIC 50V 68 PF	
C1576	421CB461	C,CERAMIC 16V 0.01UF	
C1577	429G6913	C,FILM 50V 0.1UF	1 1 1 1 1 1
C1601	433A4159	C,ELEC 50V 0.47UF-5BSRAAT	
C1602	429G6912	C,FILM 50V 0.082UF	
C1603	430A8128	C,ELEC 50V 1UF	
C1604	430A8109	C,ELEC 16V 10UF	
C1605	430A8101	C,ELEC 6.3V 22UF	1 1 1 1
C1606	430A8103	C,ELEC 6.3V 47UF	
C1607	421CB029	C,CERAMIC 50V 47 PF	
C1608	43983306	C,ELEC 6.3V 470UF	
C1609	430A8104	C,ELEC 6.3V 100UF	
C1610	421CB037	C.CERAMIC 50V 100PF C.ELEC 50V 0.1UF C.ELEC 16V 10UF C.ELEC 50V 1UF C.ELEC 16V 10UF	1
C1611	430A8124		1
C1612	430A8109		1
C1613	430A8128		1
C1614	430A8109		1
C1615	430A8114	C,ELEC 25V 4.7UF	1 1 1
C1616	430A8103	C,ELEC 6.3V 47UF	
C1617	430A8144	C,ELEC 6.3V 220UF,AT	
C1618	430A8105	C,ELEC 10V 22UF	

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1619	430A8109	C,ELEC 16V 10UF	1
C1620	429G6915	C,METAL FILM 50V 0.15UF	1
C1621	429G6912	C,FILM 50V 0.082UF	1
C1622	429G8269	C,METAL FILM 50V 0.033UF	1
C1623	429G6913	C,FILM 50V 0.1UF	1
C1624	429G8251	C,METAL FILM 50V 1000PF	1
C1625	429G8263	C,METAL FILM 50V 0.01UF	1 1 1 1 1 1 1 1
C1626	429G6919	C,METAL FILM 50V 0.33UF	
C1627	433A4159	C,ELEC 50V 0.47UF-5BSRAAT	
C1628	421CB037	C,CERAMIC 50V 100PF	
C1629	421CB037	C,CERAMIC 50V 100PF	
C1630 C1631 C1632 C1633 C1634	421CB863 421CB041 429G8267 429G8267 430A8103	C,CERAMIC 25V 0.022UF C,CERAMIC 50V 220PF C,METAL FILM 50V 0.022UF C,METAL FILM 50V 0.022UF C,ELEC 6.3V 47UF	1 1 1 1
C1635	421CB863	C,CERAMIC 25V 0.022UF	1 1 1 1 1
C1636	421CB037	C,CERAMIC 50V 100PF	
C1637	421CB025	C,CERAMIC 50V 33 PF	
C1638	421CB025	C,CERAMIC 50V 33 PF	
C1639	430A8128	C,ELEC 50V 1UF	
C1640 C1641 C1642 C1645 C1646	429G6915 421CB453 421CB049 430A8109 430A8103	C,METAL FILM 50V 0.15UF C,CERAMIC 16V 2200PF C,CERAMIC 50V 1000PF C,ELEC 16V 10UF C,ELEC 6.3V 47UF	1 1 1 1
C1649	421CB863	C,CERAMIC 25V 0.022UF	1
C1655	421CB863	C,CERAMIC 25V 0.022UF	1
C1659	421CB461	C,CERAMIC 16V 0.01UF	1
C1660	430A8125	C,ELEC 50V 0.22UF	1
C1661	421CB019	C,CERAMIC 50V 18 PF	1
C1771 C1777 C1778 C1779 C1780	430A8109 430A8110 430A8112 430A8112 421A0933	C.ELEC 16V 10UF C.ELEC 16V 22UF C.ELEC 16V 47UF C.ELEC 16V 47UF C.CERAMIC 50V 0.047UF	1 1 1 1
C1781	421CB461	C,CERAMIC 16V 0.01UF	1
C1871	430A8104	C,ELEC 6.3V 100UF	1
C1872	421J9001	C,CERAMIC 50V 0.1UF	1

MODEL: SYSCON/SERVO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1873	423A3051	C.CERAMIC 50V 150PF	1
C1874	42110931	C.CERAMIC 50V 0.033UF	
C1875	421J9001	C,CERAMIC 50V 0.1UF	1 1 1
C1876	430A8316	C,ELEC 16V 4.7UF	
C1901	430A8112	C,ELEC 16V 47UF	
C1902	421CB863	C,CERAMIC 25V 0.022UF	

MODEL : VIDEO PWB ASSY

Q1213 Q1215 356D0501 356D0618

MODEL : VIDEO PWB ASSY				
SYMBOL	PARTS NO	DESCRIPTION	QTY	
*** CS	***			
IC1 IC1201 IC1202 IC1203 IC1204	37151538 37101409 37101364 37101410 37101159	UPD74HC4538C (MONO-MULTI) IC AN3232FB VK-3 S-VHS Y IC VC2031DP IC AN3398 S-VHS AUTO SW LA7016 ANALOG SW	1 1 1	
1C1205 1C1206 1C1401 1C1402 1C1403	37101159 37101159 37101283 37151240 37101249	LA7016 ANALOG SW LA7016 ANALOG SW AN6367NK(P/MS CHROMA MOD) IC MN6163A (CHROMA SYNC) BA7025L (SECAM DET)	1 1 1 1	
101404 101405 101406 101407 101408	37101439 37151538 37101159 37101159 37101159	MSM6967-RS (CCD PAL 3FSC) UPD74HC4538C (MONO-MULTI) LA7016 ANALOG SW LA7016 ANALOG SW LA7016 ANALOG SW	1 1 1	
1C1409 1C1410 1C1411 1C1412 1C1413	37101159 37101159 37051036 37101159 37101159	LA7016 ANALOG SW LA7016 ANALOG SW MOS UPD4066BC LA7016 ANALOG SW LA7016 ANALOG SW	1 1 1	
1C1415 1C1416 1C1417 1C2	37101159 37101449 37101159 37051036	LA7016 ANALOG SW IC M51386L(COMB PROCESS) LA7016 ANALOG SW MOS UPD4066BC	1 1 1	
*** TRA	NSISTORS **	k*	T	
Q1 Q1203 Q1204 Q1205 Q1206	355D2710 356D0501 355K2112 356D0501 356D0501	DTC124ES,AT DTC124EK(0°) UN4121(2.2K) DIGITRA DTC124EK(0°) DTC124EK(0°)	1 1	
Q1208 Q1209 Q1210 Q1211 Q1212	356D0501 355K2112 355K2113 356D0501 356D0501	DTC124EK(0°) UN4121(2.2K) DIGITRA DTR UN4122(PNP 4.7K),AT DTC124EK(0°) DTC124EK(0°)	1 1	

DTC124EK(0°) 2SC2412K-R(0°)

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1216	356K0618	2SA1037K-R,AT	1 1
Q1217	356D0501	DTC124EK(0°)	
Q1218	356D0501	DTC124EK(0°)	
Q1219 Q1220 Q1221 Q1222 Q1223	356D0500 356D0500 356K0502 356K0501 356D0618	DTC144EK(0°) DTC144EK(0°) DTA114EK(0°) DTA124EK(0°) 2SC2412K-R(0°)	1 1 1
Q1224 Q1226 Q1227 Q1228 Q1229	356D0618 356K0501 356D0500 356K0501 356D0501	2SC2412K-R(0°) DTA124EK(0°) DTC144EK(0°) DTA124EK(0°) DTC124EK(0°)	1 1 1
Q1230	356K0618	2SA1037K-R,AT	1 1 1 1 1
Q1231	356D0618	2SC2412K-R(0°)	
Q1232	356D0618	2SC2412K-R(0°)	
Q1233	356D0618	2SC2412K-R(0°)	
Q1234	356D0618	2SC2412K-R(0°)	
Q1235	356D0618	2SC2412K-R(0°)	1 1 1 1 1
Q1236	356D0618	2SC2412K-R(0°)	
Q1237	356D0618	2SC2412K-R(0°)	
Q1238	356D0618	2SC2412K-R(0°)	
Q1239	356D0618	2SC2412K-R(0°)	
Q1240	356D0618	2SC2412K-R(0°)	1 1 1 1 1 1
Q1241	356D0618	2SC2412K-R(0°)	
Q1242	356D0501	DTC124EK(0°)	
Q1243	355K2113	DTR UN4122(PNP 4.7K),AT	
Q1244	356D0501	DTC124EK(0°)	
Q1245	356D0618	2SC2412K-R(0°)	1 1 1 1 1 1
Q1249	356D0618	2SC2412K-R(0°)	
Q1250	356K0618	2SA1037K-R,AT	
Q1251	356D0618	2SC2412K-R(0°)	
Q1252	356D0618	2SC2412K-R(0°)	
Q1253	356K0618	2SA1037K-R,AT	1 1 1 1 1 1
Q1254	356D0501	DTC124EK(0°)	
Q1255	356D0501	DTC124EK(0°)	
Q1256	356D0500	DTC144EK(0°)	
Q1257	356D0500	DTC144EK(0°)	
Q1258	35502710	DTC124ES.AT	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q1265	355D2710	DTC124ES,AT	1 1 1 1
Q1401	356K0618	2SA1037K-R,AT	
Q1402	356D0618	2SC2412K-R(0°)	
Q1403	356D0618	2SC2412K-R(0°)	
Q1406	356K0618	2SA1037K-R,AT	1 1 1 1 1 1
Q1407	356D0618	2SC2412K-R(O°)	
Q1408	356D0618	2SC2412K-R(O°)	
Q1410	356K0501	DTA124EK(O°)	
Q1412	356D0501	DTC124EK(O°)	
Q1413 Q1414 Q1415 Q1416 Q1417	356D0501 356D0501 356K0618 356K0501 356D0618	DTC124EK(0°) DTC124EK(0°) 2SA1037K-R,AT DTA124EK(0°) 2SC2412K-R(0°)	1 1 1
Q1418 Q1419 Q1420 Q1421 Q1422	356D0618 356D0618 356K0618 356K0618 356D0618	2SC2412K-R(0°) 2SC2412K-R(0°) 2SA1037K-R,AT 2SA1037K-R,AT 2SC2412K-R(0°)	1 1 1 1
Q1423	356K0618	2SA1037K-R,AT	1 1 1
Q1424	356K0501	DTA124EK(0°)	
Q1425	356D0618	2SC2412K-R(0°)	
Q1426	356D0618	2SC2412K-R(0°)	
Q1427	356D0618	2SC2412K-R(0°)	
Q1428	356D0618	2SC2412K-R(0°)	1 1 1 1
Q1430	356D0501	DTC124EK(0°)	
Q1431	356D0618	2SC2412K-R(0°)	
Q1432	356D0618	2SC2412K-R(0°)	
Q1434	356D0618	2SC2412K-R(0°)	
Q1435	356D0618	2SC2412K-R(0°)	1 1 1
Q1438	356D0618	2SC2412K-R(0°)	
Q1439	356D0500	DTC144EK(0°)	
Q1440	356D0618	2SC2412K-R(0°)	
Q1441	356D0618	2SC2412K-R(0°)	
Q1442	355D1931	TR,2SC2785(E,F,H,J)AT	1
Q1443	355D2710	DTC124ES,AT	1
Q1444	355K2106	TR,DTA124ES,AT	1
Q1445	355D2710	DTC124ES,AT	1
Q1446	355D2710	DTC124ES,AT	1
Q2	355D2710	DTC124ES,AT	1

MODEL : VIDEO PWB ASSY

		•	
SYMBOL	PARTS NO	DESCRIPTION	QTY
Q3	355D2710	DTC124ES,AT	1
Q4	355D2710	DTC124ES,AT	1
TR1	355K1131	TR,2SA1175 (E,F,H,J)	1
TR2	355D1931	TR,2SC2785(E,F,H,J)AT	1
*** DIC	DES ***		
D1	360KA025	DIODE 1SS133	1 1 1
D1201	360K3909	CHIP DIODE 1S2838-A6-T1	
D1202	360K3909	CHIP DIODE 1S2838-A6-T1	
D1203	360K3908	CHIP DIODE 1S2836-A4-T1	
D1205	360K3909	CHIP DIODE 1S2838-A6-T1	
D1206 D1207 D1401 D1402 D1403	360KA025 360KA025 360K3909 360K3909 360K3909	DIODE 1SS133 DIODE 1SS133 CHIP DIODE 1S2838-A6-T1 CHIP DIODE 1S2838-A6-T1 CHIP DIODE 1S2838-A6-T1	1 1 1 1
D1404	360K3909	CHIP DIODE 1S2838-A6-T1	1 1
D1405	360KA025	DIODE 1SS133	
D1406	360KA025	DIODE 1SS133	
D2	360KA025	DIODE 1SS133	
D3	360KA025	DIODE 1SS133	
D4	360KA025	DIODE 1SS133	1 1
D5	360KA025	DIODE 1SS133	
D6	360KA025	DIODE 1SS133	
ZD1401	369KE179	ZENER DIODE RD9.1EB2,AT26	
*** VAF	RIABLE RESISTO	DRS ***	
VR1 VR1201 VR1202 VR1203 VR1204	41951257 41951150 41951148 41951146 41951142	R,VARIABLE 47KB R,VARIABLE 22K,B R,VARIABLE 10K,B R,VARIABLE 4.7K,B R,VARIABLE 1.0K,B	1 1 1 1
VR1205	41951150	R,VARIABLE 22K,B	1 1
VR1206	41951148	R,VARIABLE 10K,B	
VR1207	41951150	R,VARIABLE 22K,B	
VR1208	41951150	R,VARIABLE 22K,B	
VR1209	41951150	R,VARIABLE 22K,B	
VR1210	41951150	R,VARIABLE 22K,B	1
VR1211	41951148	R,VARIABLE 10K,B	1
VR1212	41951150	R,VARIABLE 22K,B	1

MODEL : VIDEO PWB ASSY

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SYMBOL	PARTS NO	DESCRIPTION	QTY
VR1213 VR1215	41951140 41951144	R, VARIABLE 470H, B R, VARIABLE 2.2K, B	1
VR1217 VR1219 VR1401 VR1402 VR1403	41951152 41951152 41951152 41951144 41951146	R,VARIABLE 47K,B R,VARIABLE 47K,B R,VARIABLE 47K,B R,VARIABLE 2.2K,B R,VARIABLE 4.7K,B	1 1 1 1
VR1404 VR1406 VR1407 VR1408 VR1409	41951142 41951152 41951150 41951148 41951148	R,VARIABLE 1.0K,B R,VARIABLE 47K,B R,VARIABLE 22K,B R,VARIABLE 10K,B R,VARIABLE 10K,B	1 1 1 1
VR1412 VR1413 VR1414	41951146 41951144 41951146	R.VARIABLE 4.7K,B R.VARIABLE 2.2K,B R.VARIABLE 4.7K,B	1 1
*** CO	ILS & FILTERS	***	1
CF1401 DL1401 DL1402 FL1201 FL1202	61137009 61551092 61551096 61827111 61827102	CERAMIC FILTER 4.16MHZ 2H DL(FOR SVHS-COMB) 2H COMB FILTER (BEND) 4.0MHZ L.P.F.(VHS-PAL) 5.4MHZ LPF (VK-3-S TOKO)	1 1 1
FL1401 FL1402 FL1403 FL1404 FL1405	61827113 61827114 61827115 61827116 61828035	4.43MHZ B.P.F.(SVHS-PAL) 5.06MHZ B.P.F.(SVHS-PAL) 1.4MHZ L.P.F.(SVHS-PAL) 120NS DL EQ (CCD L.P.F.) COMB Y EQ(PAL)	1 1 1
FL1406 FL1407 L1201 L1202 L1203	61828036 61828037 610G1829 610G1529 610G1811	COMB C EQ(PAL) CHROMA DL EQ FILTER COIL 0405 100UH,AT FILTER COIL 100UH AT (S) FILTER COIL 0405 3.3UH,AT	1 1 1
L1205 L1207 L1208 L1209 L1211	610G1529 610G1529 610G1829 610G1834 610G1823	FILTER COIL 100UH AT (S) FILTER COIL 100UH AT (S) FILTER COIL 0405 100UH,AT FILTER COIL 0405 270UH,AT FILTER COIL 0405 33UH,AT	1 1 1 1
L1212 L1213	610G1829 610G1825	FILTER COIL 0405 100UH,AT FILTER COIL 0405 47UH,AT	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
L1214 L1215 L1216	610G1821 610G1829 610G1830	FILTER COIL 0405 22UH,AT FILTER COIL 0405 100UH,AT FILTER COIL 0405 120UH,AT	1 1 1
L1217 L1219 L1220 L1221 L1223	610G1822 610G1830 610G1822 610G1830 610G1829	FILTER COIL 0405 27UH,AT FILTER COIL 0405 120UH,AT FILTER COIL 0405 27UH,AT FILTER COIL 0405 120UH,AT FILTER COIL 0405 100UH,AT	1 1 1 1
L1224 L1225 L1226 L1227 L1228	610G1838 610G1819 610G1818 610G1835 610G1831	FILTER COIL 0405 560UH,AT FILTER COIL 0405 15UH,AT FILTER COIL 0405 12UH,AT FILTER COIL 0405 330UH,AT FILTER COIL 0405 150UH,AT	1
L1229 L1230 L1401 L1402 L1404	610G1820 610G1828 610G1817 610G1822 610G1825	FILTER COIL 0405 18UH,AT FILTER COIL 0405 82UH,AT FILTER COIL 0405 10UH,AT FILTER COIL 0405 27UH,AT FILTER COIL 0405 47UH,AT	1 1 1
L1405 L1406 L1407 L1408 L1409	610G1835 610G1833 610G1545 610G1841 610G1841	FILTER COIL 0405 330UH,AT FILTER COIL 0405 220UH,AT FILTER COIL 2200UH FILTER COIL 405 1MH,AT FILTER COIL 405 1MH,AT	1 1 1 1
L1410 L1411 L1412 L1413 L1414	610G1841 610G1517 610G1817 610G1823 610G1819	FILTER COIL 405 1MH,AT FILTER COIL 10UH AT (S) FILTER COIL 0405 10UH,AT FILTER COIL 0405 33UH,AT FILTER COIL 0405 15UH,AT	1 1 1 1
L1417 T1401 T1402	610G1533 61815196 61828014	FILTER COIL 220UH AT(S) COMB MATCHING 7P 15UH LC FILTER (8KHZ TRAP)	1 1
*** PWB	ASSYS ***		
	81B26C01 81B26W01 81B26Z01	CHROMA CTRL PWB ASSY SUB VIDEO PWB ASSY SUB VIDEO 2 PWB ASSY	1 1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ELE	L ECTRICAL PARTS	S & MISCELLANE OUS PARTS	***
X1401 X1402	64004143 64004173	X'TAL 4.43MHZ (W/O-ADJ) X'TAL 13.3MHZ (3FSC-PAL)	1
*** APF	PEARANCE PARTS	·**	
	16289031	SUPPORT S	2
*** RES	SISTORS ***		
R1 R1 R1201 R1202 R1203	401KE697 401KE745 404X8697 404X8673 404X8697	R.CARBON 10K 5% 1/6W R.CARBON 1.0M 5% 1/6W R.CHIP METAL 10K 5%1/16W R.CHIP METAL 1.0H 5%1/16W R.CHIP METAL 1.0H 5%1/16W	1 1 1
R1204 R1205 R1206 R1207 R1208	404X8737 404X8753 404X8673 404X8673 404X8673	R CHIP METAL 470K 5%1/16W R CHIP METAL 2.2M 5%1/10W R CHIP METAL 1.0H 5%1/16W	1 1
R1209 R1210 R1211 R1212 R1213	404X8673 404X8685 404X8677 404X8673 404X8685	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 1.5H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 3.3K 5%1/16W	1 1 1 1
R1214 R1215 R1216 R1217 R1218	404X8665 404X8673 404X8719 404X8673 404X8665	R CHIP METAL 470H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 82K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 470H 5%1/16W	1 1 1 1
R1219 R1220 R1221 R1222 R1223	404X8685 404X8685 404X8673 404X8677 404X8673	R CHIP METAL 3.3K 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1
R1224 R1225 R1226 R1227 R1228	404X8693 404X8691 404X8657 404X8673 404X8697	R CHIP METAL 6.8K 5%1/16W R CHIP METAL 5.6K 5%1/16W R CHIP METAL 220H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 10K 5%1/16W	1 1 1 1 1
R1229	404X8681	R CHIP METAL 2.2K 5%1/16W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION	QTY
R1230 R1231 R1232 R1233	404X8717 404X8701 404X8681 404X8669	R CHIP METAL 68K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 680H 5%1/16W	1 1 1	R1272 R1273 R1274 R1275	404X8713 404X8713 404X8655 404X8703	R CHIP METAL 47K 5%1/16W R CHIP METAL 47K 5%1/16W R CHIP METAL 180H 5%1/16W R CHIP METAL 18K 5%1/16W	1 1 1
R1234 R1235 R1236 R1237 R1239	404X8677 404X8662 404X8677 404X8713 404X8669	R CHIP METAL 1.5K 5%1/16W R CHIP METAL 360H 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 47K 5%1/16W R CHIP METAL 680H 5%1/16W	1 1 1 1 1	R1277 R1278 R1281 R1282 R1283	404X8673 404X8681 404X8673 404X8673 404X8673	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1
R1240 R1241 R1242 R1243 R1244	404X8671 404X8671 404X8665 404X8677 404X8697	R CHIP METAL 820H 5%1/16W R CHIP METAL 820H 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 10K 5%1/16W		R1284 R1285 R1286 R1287 R1289	409HB657 404X8697 404X8649 404X8721 404X8663	R.CARBON 220H 5% 1/4W R CHIP METAL 10K 5%1/16W R CHIP METAL 100H 5%1/16W R CHIP METAL 100K 5%1/16W R CHIP METAL 390H 5%1/16W	1 1
R1245 R1246 R1247 R1248 R1249	404X8671 404X8697 404X8661 404X8669 404X8661	R CHIP METAL 820H 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 330H 5%1/16W R CHIP METAL 680H 5%1/16W R CHIP METAL 330H 5%1/16W	1 1 1 1 1 1 1 1 1 1 1 1 1	R1291 R1292 R1293 R1294 R1295	404X8667 404X8675 404X8669 404X8673 404X8697	R CHIP METAL 560H 5%1/16W R CHIP METAL 1.2K 5%1/16W R CHIP METAL 680H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0K 5%1/16W	1 1
R1250 R1251 R1252 R1253 R1254	404X8801 404X8565 404X8665 404X8691 404X8675	R.CHIP METAL 000H JOUMPER R CHIP METAL 470H 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 5.6K 5%1/16W R CHIP METAL 1.2K 5%1/16W	1 1 1 1 1	R1296 R1297 R1298 R1299 R1300	404X8691 404X8699 404X8701 404X8663 404X8663	R CHIP METAL 5.6K 5%1/16W R CHIP METAL 12K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 390H 5%1/16W R CHIP METAL 390H 5%1/16W	1 1 1
R1255 R1256 R1257 R1258 R1259	404X8675 404X8669 404X8673 404X8669 404X8661	R CHIP METAL 1.2K 5%1/16W R CHIP METAL 680H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 680H 5%1/16W R CHIP METAL 330H 5%1/16W	1 1 1 1 1 1	R1301 R1302 R1303 R1304 R1305	404X8674 404X8667 404X8703 404X8665 404X8695	R CHIP METAL 1.1K 5%1/16W R CHIP METAL 560H 5%1/16W R CHIP METAL 18K 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 8.2K 5%1/16W	1 1 1
R1260 R1261 R1262 R1263 R1264	404X8665 404X8665 404X8699 404X8673 404X8665	R CHIP METAL 470H 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 12K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 470H 5%1/16W	1 1 1 1	R1307 R1309 R1313 R1314 R1315	404X8697 404X8713 404X8701 404X8673 404X8741	R CHIP METAL 10K 5%1/16W R CHIP METAL 47K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 680K 5%1/16W	1 1 1
R1265 R1266 R1267 R1268 R1269	404X8659 404X8703 404X8699 404X8707 404X8665	R CHIP METAL 270H 5%1/16W R CHIP METAL 18K 5%1/16W R CHIP METAL 12K 5%1/16W R CHIP METAL 27K 5%1/16W R CHIP METAL 470H 5%1/16W	1 1 1 1 1 1 1	R1316 R1317 R1318 R1319 R1320	404X8721 404X8681 404X8677 404X8659 404X8713	R CHIP METAL 100K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 270H 5%1/16W R CHIP METAL 47K 5%1/16W	1 1 1
R1271	404X8673	R CHIP METAL 1.0H 5%1/16W	1	R1321	404X8705	R CHIP METAL 22K 5%1/16W	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION	QTY
R1322 R1323 R1324 R1325	404X8713 404X8705 404X8705 404X8673	R CHIP METAL 47K 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1	R1446 R1447 R1448 R1449	404X8697 404X8673 404X8673 404X8673	R CHIP METAL 10K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1
R1326 R1327 R1328 R1330 R1331	404X8659 404X8705 404X8697 404X8697 404X8689	R CHIP METAL 270H 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 4.7K 5%1/16W	1 1 1	R1450 R1451 R1452 R1454 R1455	404X8657 404X8664 404X8657 404X8679 404X8691	R CHIP METAL 220H 5%1/16W R CHIP METAL 430H 5%1/16W R CHIP METAL 220H 5%1/16W R CHIP METAL 1.8K 5%1/16W R CHIP METAL 5.6K 5%1/16W	1 1 1 1 1
R1332 R1333 R1334 R1335 R1340	404X8681 404X8665 401KE653 401KE660 401KE689	R CHIP METAL 2.2K 5%1/16W R CHIP METAL 470H 5%1/16W R,CARBON 150H 5% 1/6W R,CARBON 300H 5% 1/6W R,CARBON 4.7K 5% 1/6W	1 1 1 1	R1456 R1457 R1458 R1459 R1460	404X8657 404X8697 404X8697 404X8665 401KE665	R CHIP METAL 220H 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 470H 5%1/16W R,CARBON 470H 5% 1/6W	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
R1342 R1401 R1419 R1420 R1421	401KE705 404X8721 409HB653 404X8689 404X8673	R,CARBON 22K 5% 1/6W R CHIP METAL 100K 5%1/16W R,CARBON 150H 5% 1/4W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1	R1461 R1462 R1463 R1464 R1465	404X8693 404X8693 404X8681 404X8709 404X8721	R CHIP METAL 6.8K 5%1/16W R CHIP METAL 6.8K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 33K 5%1/16W R CHIP METAL 100K 5%1/16W	1 1 1
R1422 R1423 R1424 R1425 R1426	404X8673 404X8681 404X8649 409HB645 404X8657	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 100H 5%1/16W R,CARBON 68H 5% 1/4W R CHIP METAL 220H 5%1/16W	1 1 1	R1466 R1467 R1469 R1470 R1471	404X8693 404X8721 409HB641 404X8707 404X8689	R CHIP METAL 6.8K 5%1/16W R CHIP METAL 100K 5%1/16W R.CARBON 47H 5% 1/4W R CHIP METAL 27K 5%1/16W R CHIP METAL 4.7K 5%1/16W	1 1 1 1 1
R1427 R1428 R1429 R1433 R1434	404X8689 404X8705 404X8717 404X8665 404X8665	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 68K 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 470H 5%1/16W	1 1 1 1	R1472 R1473 R1474 R1475 R1476	404X8669 404X8683 404X8685 404X8691 404X8725	R CHIP METAL 680H 5%1/16W R CHIP METAL 2.7K 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 5.6K 5%1/16W R CHIP METAL 150K 5%1/16W	1 1 1 1
R1435 R1436 R1437 R1438 R1439	404X8689 404X8697 404X8673 404X8673 404X8721	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1	R1477 R1478 R1479 R1480 R1481	404X8681 404X8697 404X8681 404X8673 404X8801	R CHIP METAL 2.2K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 1.0H 5%1/16W R,CHIP METAL 000H JOUMPER	1 1 1 1 1
R1440 R1441 R1442 R1443 R1444	404X8673 404X8673 404X8693 404X8745 404X8695	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 6.8K 5%1/16W R CHIP METAL 1.0M 5%1/16W R CHIP METAL 8.2K 5%1/16W	1 1 1 1	R1482 R1484 R1485 R1486 R1487	404X8675 404X8673 404X8673 404X8657 404X8657	R CHIP METAL 1.2K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 220H 5%1/16W R CHIP METAL 220H 5%1/16W	1 1 1
R1445	404X8691	R CHIP METAL 5.6K 5%1/16W	1	R1488	404X8697	R CHIP METAL 10K 5%1/16W	1

MODEL : VIDEO PWB ASSY

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QTY

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION
1	1	I	<u> </u>		l	
R1489 R1492 R1493 R1494	404X8659 404X8697 404X8685 404X8689	R CHIP METAL 270H 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 4.7K 5%1/16W	1 1 1 1	R1543 R1544 R1545 R1546	404X8669 404X8673 404X8673 404X8705	R CHIP METAL 680H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 22K 5%1/16W
R1503 R1504 R1505 R1506 R1507	404X8657 404X8673 404X8721 404X8683 404X8673	R CHIP METAL 220H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 100K 5%1/16W R CHIP METAL 2.7K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1 1	R1547 R1548 R1549 R1552 R1553	404X8697 404X8675 404X8667 404X8707 404X8697	R CHIP METAL 10K 5%1/16W R CHIP METAL 1.2K 5%1/16W R CHIP METAL 560H 5%1/16W R CHIP METAL 27K 5%1/16W R CHIP METAL 10K 5%1/16W
R1508 R1510 R1511 R1513 R1514	404X8673 404X8697 404X8669 404X8665 404X8665	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 680H 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 470H 5%1/16W	1 1 1 1	R1554 R1555 R1556 R1557 R1558	404X8681 404X8681 404X8709 404X8701 404X8665	R CHIP METAL 2.2K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 33K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 470H 5%1/16W
R1515 R1516 R1518 R1519 R1520	404X8724 404X8685 404X8681 404X8697 404X8697	R CHIP METAL 130K 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 2.2K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 10K 5%1/16W	1 1 1 1 1 1 1 1	R1559 R1560 R1561 R1562 R1563	404X8681 404X8683 404X8705 404X8695 401KE673	R CHIP METAL 2.2K 5%1/16W R CHIP METAL 2.7K 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 8.2K 5%1/16W R,CARBON 1.0K 5% 1/6W
R1521 R1523 R1524 R1525 R1526	404X8667 404X8701 404X8697 404X8659 404X8673	R CHIP METAL 560H 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 270H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1	R1564 R1566 R1567 R2 R3	401KE701 401KE705 401KE691 401KE697 401KE675	R.CARBON 15K 5% 1/6W R.CARBON 22K 5% 1/6W R.CARBON 5.6K 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 1.2K 5% 1/6W
R1527 R1528 R1529 R1530 R1531	404X8801 404X8675 404X8673 404X8673 404X8673	R,CHIP METAL 000H JOUMPER R CHIP METAL 1.2K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1	R3 R4 R4 R5 R5	401KE689 401KE645 401KE697 401KE649 401KE697	R.CARBON 4.7K 5% 1/6W R.CARBON 68H 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 100H 5% 1/6W R.CARBON 10K 5% 1/6W
R1532 R1533 R1534 R1535 R1536	404X8673 404X8709 404X8705 404X8661 404X8659	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 33K 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 330H 5%1/16W R CHIP METAL 270H 5%1/16W	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R6 R6 R7 R7	401KE705 401KE713 401KE681 401KE705	R,CARBON 22K 5% 1/6W R,CARBON 47K 5% 1/6W R,CARBON 2.2K 5% 1/6W R,CARBON 22K 5% 1/6W
K1550	40470009		'	*** CA	PACITORS **	*
R1537 R1538 R1539 R1540 R1541	404X8675 404X8707 404X8697 404X8673 404X8663	R CHIP METAL 1.2K 5%1/16W R CHIP METAL 27K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 390H 5%1/16W	1 1 1 1 1 1 1	C1 C1 C1201 C1202 C1203	429G6526 430A8127 430A8103 421A0425 430A8129	C,FILM 50V 0.12UF 5% C,ELEC 50V 0.47UF C,ELEC 6.3V 47UF C,CERAMIC 50V 0.01UF C,ELEC 50V 2.2UF
R1542	404X8633	R CHIP METAL 22H 5%1/16W	1	L		

MODEL : VIDEO PWB ASSY

MODEL : VIDEO PWB ASS	MODEL	:	VIDEO	PWB	ASS
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SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION	QTY
01004	40071050	OO OHIDIO FOV IFODESK		C1244	430A8114	C.ELEC 25V 4.7UF	1
C1204 C1205 C1206 C1207 C1208	423X1653 423X9697 430A8114 423X9697 430A8112	CC CHIP12 50V 150PF5% CC CHIP12 JF50V0.01UF 80% C.ELEC 25V 4.7UF CC CHIP12 JF50V0.01UF 80% C.ELEC 16V 47UF	1	C1245 C1246 C1247 C1248 C1249	423X9697 423X1633 423X1669 423X9697 423X1651	CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 22PF5% CC CHIP12 50V 680PF5% CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 120PF5%	1 1 1 1 1
C1209 C1210 C1211 C1212 C1213	421A0425 423X9697 430A8105 430A8109 430A8109	C.CERAMIC 50V 0.01UF CC CHIP12 JF50V0.01UF 80% C.ELEC 10V 22UF C.ELEC 16V 10UF C.ELEC 16V 10UF	1 1 1 1	C1252 C1253 C1254 C1255 C1256	423X1645 423X1645 430A8109 423X1645 430A8109	CC CHIP12 50V 68PF5% CC CHIP12 50V 68PF5% C.ELEC 16V 10UF CC CHIP12 50V 68PF5% C.ELEC 16V 10UF	1 1 1
C1214 C1215 C1216 C1217 C1218	430A8114 430A8103 421A0425 43026018 421A0425	C,ELEC 25V 4.7UF C,ELEC 6.3V 47UF C,CERAMIC 50V 0.01UF C,ELEC 10V 330UF C,CERAMIC 50V 0.01UF	1 1 1 1 1 1 1	C1257 C1258 C1259 C1260 C1261	430A8103 421A0425 423X9705 423X1665 423X1635	C,ELEC 6.3V 47UF C,CERAMIC 50V 0.01UF CC CHIP12 JF50V0.022UF80% CC CHIP12 50V 470PF5% CC CHIP12 50V 27PF5%	1 1 1 1
C1219 C1220 C1221 C1222 C1223	423X1657 423X1647 423X1659 423X1659 423X1647	CC CHIP12 50V 220PF5% CC CHIP12 50V 82PF5% CC CHIP12 50V 270PF5% CC CHIP12 50V 270PF5% CC CHIP12 50V 82PF5%	1 1 1 1 1 1 1 1 1	C1263 C1264 C1265 C1266 C1267	423X9697 423X1639 423X9705 430A8105 423X1665	CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 39PF5% CC CHIP12 JF50V0.022UF80% C.ELEC 10V 22UF CC CHIP12 50V 470PF5%	1 1 1 1 1 1 1
C1224 C1225 C1226 C1227 C1228	423X1659 423X1659 423X1657 430A8114 430A8114	CC CHIP12 50V 270PF5% CC CHIP12 50V 270PF5% CC CHIP12 50V 220PF5% C.ELEC 25V 4.7UF C.ELEC 25V 4.7UF	1 1 1	C1268 C1269 C1270 C1271 C1272	423X1617 423X1665 423X1633 423X9697 423X1625	CC CHIP12 50V 4.5PF D CC CHIP12 50V 470PF5% CC CHIP12 50V 22PF5% CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 10PF5%	1 1 1 1
C1229 C1230 C1231 C1232 C1233	430A8109 430A8114 433A4135 423X1659 430A8114	C,ELEC 16V 10UF C,ELEC 25V 4.7UF C,ELEC 16V 4.7UF-5BSRA CC CHIP12 50V 270PF5% C,ELEC 25V 4.7UF	1 1 1 1	C1273 C1274 C1275 C1276 C1277	423X9705 423X1649 430A8109 421A0425 423X1651	CC CHIP12 JF50V0.022UF80% CC CHIP12 50V 100PF5% C.ELEC 16V 10UF C.CERAMIC 50V 0.01UF CC CHIP12 50V 120PF5%	1 1 1 1
C1234 C1235 C1236 C1237 C1238	421A0433 423X1653 421A0433 423X1655 423X1669	C.CERAMIC 50V 0.047UF CC CHIP12 50V 150PF5% C.CERAMIC 50V 0.047UF CC CHIP12 50V 180PF5% CC CHIP12 50V 680PF5%	1 1 1	C1278 C1279 C1280 C1282 C1283	423X1669 423X9705 423X1645 423X1669 423X9705	CC CHIP12 50V 680PF5% CC CHIP12 JF50V0.022UF80% CC CHIP12 50V 68PF5% CC CHIP12 50V 680PF5% CC CHIP12 JF50V0.022UF80%	1 1 1 1
C1239 C1240 C1241 C1242	423X9697 423X9697 423X9221 423X9697	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF25V 0.1UF 80% CC CHIP12 JF50V0.01UF 80%	1 1 1	C1286 C1287 C1296	430A8103 421A0425 423X9705	C.ELEC 6.3V 47UF C.CERAMIC 50V 0.01UF CC CHIP12 JF50V0.022UF80%	1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1297 C1298	423X1647 423X1635	CC CHIP12 50V 82PF5% CC CHIP12 50V 27PF5%	1 1
C1299 C1300 C1303 C1304 C1305	423X1641 423X1659 423X1633 423X9705 423X1651	CC CHIP12 50V 47PF5% CC CHIP12 50V 270PF5% CC CHIP12 50V 22PF5% CC CHIP12 JF50V0.022UF80% CC CHIP12 50V 120PF5%	1 1 1 1 1 1
C1306 C1308 C1313 C1314 C1315	430A8105 423X1663 423X1635 430A8105 430A8109	C,ELEC 10V 22UF CC CHIP12 50V 390PF5% CC CHIP12 50V 27PF5% C,ELEC 10V 22UF C,ELEC 16V 10UF	1
C1316 C1318 C1319 C1320 C1401	423X1641 430A8105 430A8105 429C0337 430A8110	CC CHIP12 50V 47PF5% C.ELEC 10V 22UF C.ELEC 10V 22UF C.CERAMIC 25V 0.1UF C.ELEC 16V 22UF	1 1 1 1 1 1 1 1 1
C1403 C1404 C1405 C1406 C1412	430A8109 430A8110 430A8105 430A8109 423X9697	C,ELEC 16V 10UF C,ELEC 16V 22UF C,ELEC 10V 22UF C,ELEC 16V 10UF CC CHIP12 JF50V0.01UF 80%	1 1 1 1
C1413 C1414 C1415 C1416 C1417	423X9697 430A8126 430A8114 430A8112 423X9705	CC CHIP12 JF50V0.01UF 80% C,ELEC 50V 0.33UF C,ELEC 25V 4.7UF C,ELEC 16V 47UF CC CHIP12 JF50V0.022UF80%	1 1 1 1
C1418 C1419 C1420 C1421 C1422	423X9705 430A8112 423X2651 423X2635 423X9705	CC CHIP12 JF50V0.022UF80% C.ELEC 16V 47UF CC CHIP12 N00050V 120PF5% CC CHIP12 N00050V 27PF 5% CC CHIP12 JF50V0.022UF80%	1 1 1
C1425 C1427 C1428 C1430 C1431	423X9697 423X9697 430A8110 423X9697 430A8105	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% C.ELEC 16V 22UF CC CHIP12 JF50V0.01UF 80% C.ELEC 10V 22UF	1 1 1 1 1 1
C1432 C1433	423X9705 430A8109	CC CHIP12 JF50V0.022UF80% C,ELEC 16V 10UF	1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1434 C1435 C1438	423X9697 423X9697 423X9705	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.022UF80%	1 1 1
C1439 C1440 C1441 C1442 C1443	423X9721 423X9705 430A8110 429G8459 423X9705	CC CHIP12 JF50V 0.1UF 80% CC CHIP12 JF50V0.022UF80% C.ELEC 16V 22UF C.FILM 50V 220PF 5% CC CHIP12 JF50V0.022UF80%	1 1
C1444 C1445 C1446 C1447 C1448	430A8109 429G8459 423X9697 423X9697 423X9705	C,ELEC 16V 10UF C,FILM 50V 220PF 5% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.022UF80%	1 1 1
C1449 C1450 C1451 C1452 C1453	423X9697 423X9697 423X9697 423X9221 423X9697	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF25V 0.1UF 80% CC CHIP12 JF50V0.01UF 80%	1 1 1 1
C1454 C1455 C1456 C1457 C1458	423X9697 430A8126 423X8909 423X9697 423X1661	CC CHIP12 JF50V0.01UF 80% C.ELEC 50V 0.33UF C.CERAMIC 50V 0.03UF CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 330PF5%	1 1 1 1
C1459 C1460 C1461 C1462 C1463	430A8103 423X9705 423X9705 423X9697 430A8125	C,ELEC 6.3V 47UF CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.01UF 80% C,ELEC 50V 0.22UF	1 1 1 1
C1464 C1465 C1467 C1468 C1469	430A8128 430A8103 423X1617 423X1673 423X9705	C,ELEC 50V 1UF C,ELEC 6.3V 47UF CC CHIP12 50V 4.5PF D CC CHIP12 50V1000PF5% CC CHIP12 JF50V0.022UF80%	1 1 1 1
C1470 C1471 C1472 C1473 C1474	423X9697 423X1645 423X9689 423A2045 423X9697	CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 68PF5% CC CHIP12 JF50V4700PF 80% C.CERAMIC 50V 100PF CC CHIP12 JF50V0.01UF 80%	1 1 1
C1475	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C1476 C1477 C1478 C1479	423X9713 423X1673 430A8103 423X9705	CC CHIP12 JF50V0.047UF80% CC CHIP12 50V1000PF5% C.ELEC 6.3V 47UF CC CHIP12 JF50V0.022UF80%	1 1 1
C1480 C1481 C1482 C1483 C1484	430A8109 430A8129 423X9697 430A8111 423X9697	C,ELEC 16V 10UF C,ELEC 50V 2.2UF CC CHIP12 JF50V0.01UF 80% C,ELEC 16V 33UF CC CHIP12 JF50V0.01UF 80%	1 1
C1485 C1486 C1488 C1489 C1490	430A8103 430A8104 423X9697 423X1655 423X1653	C.ELEC 6.3V 47UF C.ELEC 6.3V 100UF CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 180PF5% CC CHIP12 50V 150PF5%	1 1 1 1
C1491 C1492 C1493 C1494 C1498	423X9697 423X9713 423X9705 423X9697 430A8103	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.047UF80% CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.01UF 80% C,ELEC 6.3V 47UF	1 1 1
C1502 C1504 C1505 C1506 C1507	430A8105 430A8105 423X9697 430A8110 430A8105	C,ELEC 10V 22UF C,ELEC 10V 22UF CC CHIP12 JF50V0.01UF 80% C,ELEC 16V 22UF C,ELEC 10V 22UF	1 1 1 1
C1508 C1509 C1510 C1511 C1512	430A8105 430A8105 430A8110 423X9697 423X1617	C,ELEC 10V 22UF C,ELEC 10V 22UF C,ELEC 16V 22UF CC CHIP12 JF50V0.01UF 80% CC CHIP12 50V 4.5PF D	1 1 1 1
C1513 C1514 C1515 C1516 C1517	433A4137 430A8107 423X1651 423X9697 430A8110	C,ELEC 16V 10UF-5BSRA C,ELEC 10V 47UF CC CHIP12 50V 120PF5% CC CHIP12 JF50V0.01UF 80% C,ELEC 16V 22UF	1 1 1
C1518 C1519 C1520 C1521 C1522	423X9697 423X9697 423X9697 423X9697 423X9697	CC CHIP12 JF50V0.01UF 80%	1 1
C1523	423X9697	CC CHIP12 JF50V0.01UF 80%	1

MODEL : VIDEO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
L	l_,		
C1524 C1526 C1527 C1529	423X9697 423X9697 423X9697 423X9697	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80%	1 1 1
C1530 C1531 C1532 C1533 C1534	423X9697 423X9697 423X9697 423X9697 421CB021	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% C.CERAMIC 50V 22 PF	1 1 1
C1536 C1537 C1538 C1539 C1540	430A8103 421CB208 430A8113 421CB862 421CB862	C,ELEC 6.3V 47UF C,CERAMIC 50V 3.9 PF C,ELEC 16V 100UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF	1 1 1 1
C1541 C1542 C3 C4 C5	421CB862 430A8109 421CB863 421CB862 421CB862	C,CERAMIC 25V 0.01UF C,ELEC 16V 10UF C,CERAMIC 25V 0.022UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF	1 1 1
VC1401	421CB019	C.CERAMIC 50V 18 PF	1

MODEL : PRE AMP PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		
1 C 5 O 1 1 C 5 O 2	37101408 37101325	IC AN3334K S-VHS PRE AMP IC UPC2304CA (HEAD AMP)	1
*** TR	ANSISTORS **	*	
TR501 TR502 TR503	356D0501 355K2125 356D0501	DTC124EK(0°) DTA114ES,AT DTC124EK(0°)	1 1
*** DIG	DDES ***		
D501 D502 D503 D504	360K3981 360K3976 360K3976 360K3981	DIODE DAP202K-P(0°)35V,AT DIODE 1S2837,AT DIODE 1S2837,AT DIODE DAP202K-P(0°)35V,AT	1
*** VAI	RIABLE RESISTO	ORS ***	
VR501 VR502	41951196 41951196	R,VARIABLE 2.2K R,VARIABLE 2.2K	1
*** CO	ILS & FILTERS	***	
L501 L502 L503 L504	610G1829 610G1829 610G1821 610G1821	FILTER COIL 0405 100UH,AT FILTER COIL 0405 100UH,AT FILTER COIL 0405 22UH,AT FILTER COIL 0405 22UH,AT	1 1 1 1
*** RE:	SISTORS ***		
R501 R502 R503 R504 R505	404X8675 404X8689 404X8671 404X8677 404X8673	R CHIP METAL 1.2K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 820H 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1
R506 R507 R508 R509 R510	404X8671 404X8685 404X8653 404X8667 404X8657	R CHIP METAL 820H 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 150H 5%1/16W R CHIP METAL 560H 5%1/16W R CHIP METAL 220H 5%1/16W	1 1 1 1
R511 R512 R513	404X8663 404X8625 404X8625	R CHIP METAL 390H 5%1/16W R CHIP METAL 10H 5%1/16W R CHIP METAL 10H 5%1/16W	1 1 1

MODEL : PRE AMP PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R514 R515	404X8663 404X8655	R CHIP METAL 390H 5%1/16W R CHIP METAL 180H 5%1/16W	1
R516 R517 R518 R519 R520	404X8625 404X8625 404X8711 404X8711 404X8661	R CHIP METAL 10H 5%1/16W R CHIP METAL 10H 5%1/16W R CHIP METAL 39K 5%1/16W R CHIP METAL 39K 5%1/16W R CHIP METAL 330H 5%1/16W	1 1 1 1
R521 R522 R523 R524 R525	404X8661 404X8657 404X8669 404X8801 404X8625	R CHIP METAL 330H 5%1/16W R CHIP METAL 220H 5%1/16W R CHIP METAL 680H 5%1/16W R.CHIP METAL 000H JOUMPER R CHIP METAL 10H 5%1/16W	1 1 1 1
R526 R527 R528 R529 R530	404X8625 404X8673 404X8693 404X8699 404X8643	R CHIP METAL 10H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 6.8K 5%1/16W R CHIP METAL 12K 5%1/16W R CHIP METAL 56H 5%1/16W	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
R531	404X8673	R CHIP METAL 1.0H 5%1/16W	1
*** CA	PACITORS **	*	
C501 C502 C503 C504 C505	423X9705 423X9697 430A8103 423X9697 423X9697	CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.01UF 80% C.ELEC 6.3V 47UF CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80%	1 1 1 1
C506 C507 C509 C510 C511	423X1673 430A8128 421CB020 423X1673 423X9697	CC CHIP12 50V1000PF5% C.ELEC 50V 1UF C.CERAMIC 50V 20 PF CC CHIP12 50V1000PF5% CC CHIP12 JF50V0.01UF 80%	1 1 1 1 1
C512 C513 C514 C515 C516	423X9221 423X1629 423X9697 423X9697 430A8112	CC CHIP12 JF25V 0.1UF 80% CC CHIP12 50V 15PF 5% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% C.ELEC 16V 47UF	1 1 1 1 1
C517 C518 C519 C523	423X9221 423X1673 430A8114 423X9221	CC CHIP12 JF25V 0.1UF 80% CC CHIP12 50V1000PF5% C.ELEC 25V 4.7UF CC CHIP12 JF25V 0.1UF 80%	1 1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
L	L	I	
C524	423X9221	CC CHIP12 JF25V 0.1UF 80%	1
C525	430A8114	C,ELEC 25V 4.7UF	
C527	430A8114	C,ELEC 25V 4.7UF	
C531	423X9221	CC CHIP12 JF25V 0.1UF 80%	
C532	423X9221	CC CHIP12 JF25V 0.1UF 80%	
C534	430A8114	C,ELEC 25V 4.7UF	
C535 C536 C537 C538 C539	423X1673 423X9221 423X9705 430A8112 423X9221	CC CHIP12 50V1000PF5% CC CHIP12 JF25V 0.1UF 80% CC CHIP12 JF50V0.022UF80% C.ELEC 16V 47UF CC CHIP12 JF25V 0.1UF 80%	1 1 1 1
C540	430A8128	C,ELEC 50V 1UF	-
C541	423X9705	CC CHIP12 JF50V0.022UF80%	
C542	423X9705	CC CHIP12 JF50V0.022UF80%	
C543	430A8128	C,ELEC 50V 1UF	
C544	423X9697	CC CHIP12 JF50V0.01UF 80%	
C545	423X1665	CC CHIP12 50V 470PF5%	1 1
C546	423X1665	CC CHIP12 50V 470PF5%	
C547	430A8109	C.ELEC 16V 10UF	
C548	423X9705	CC CHIP12 JF50V0.022UF80%	
C549	430A8112	C.ELEC 16V 47UF	
C550	423X9697	CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80% CC CHIP12 JF50V0.01UF 80%	1
C551	423X9697		1
C552	423X9697		1

MODEL : FLYING ERASE PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** TRA	NSISTORS *	**	
TR601 TR602 TR603 TR604 TR605	355K2118 355D2716 355D2716 355D2716 355D3742	DTB143ES,AT(A-4.7K 500MA) TR,BA1F4M TR,BA1F4M TR,BA1F4M TR 2SC1741S(PQR),AT	1 1 1 1
TR606 TR607 TR608 TR609 TR610	355D2716 355D3742 355K3042 355D3842 355D3842	TR,BA1F4M TR 2SC1741S(PQR),AT TR 2SA854S (PQR),AT TR 2SC1740S (PQR),AT TR 2SC1740S (PQR),AT	1 1 1 1
TR611 TR612	355K3042 355D3742	TR 2SA854S (PQR),AT TR 2SC1741S(PQR),AT	1
*** CO1	LS & FILTERS	***	
L601 L602	610G1817 610G1814	FILTER COIL 0405 10UH,AT FILTER COIL 0405 5.6UH,AT	1
*** RES	ISTORS ***		
R601 R602 R603 R604 R605	401KE713 401KE697 401KE697 401KE705 401KE701	R.CARBON 47K 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 22K 5% 1/6W R.CARBON 15K 5% 1/6W	1 1 1 1
R606 R607 R608 R609 R610	401KE645 401KE683 401KE675 401KE701 401KE701	R.CARBON 68H 5% 1/6W R.CARBON 2.7K 5% 1/6W R.CARBON 1.2K 5% 1/6W R.CARBON 15K 5% 1/6W R.CARBON 15K 5% 1/6W	1 1 1 1
R611 R612 R613 R614 R615	401KE661 401KE675 401KE645 401KE665 401KE673	R,CARBON 330H 5% 1/6W R,CARBON 1.2K 5% 1/6W R,CARBON 68H 5% 1/6W R,CARBON 470H 5% 1/6W R,CARBON 1.0K 5% 1/6W	1 1 1 1 1 1
R616 R617 R61 B R619 R620	401KE689 401KE689 401KE673 401KE633 401KE633	R,CARBON 4.7K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 22H 5% 1/6W R,CARBON 22H 5% 1/6W	1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** CA	PACITORS ***	*	
C601 C602 C603 C604 C605	421CB863 421CB033 421CB037 421CB029 421CB461	C,CERAMIC 25V 0.022UF C,CERAMIC 50V 68 PF C,CERAMIC 50V 100PF C,CERAMIC 50V 47 PF C,CERAMIC 16V 0.01UF	1 1 1
C606 C607 C608 C611 C612	421CB035 421CB461 421CB461 421CB034 421CB212	C,CERAMIC 50V 82 PF C,CERAMIC 16V 0.01UF C,CERAMIC 16V 0.01UF C,CERAMIC 50V 75 PF C,CERAMIC 50V 8.2 PF	1 1 1 1
C613	421CB863	C.CERAMIC 25V 0.022UF	1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		 1
1C4001 1C4002 1C4101	37101347 37101421 37101403	IC BA7767AS (AUDIO) IC BA7755A (SWITCH) HIC EHM-GJC93C22K(PAL-1)	1 1
*** TRA	NSISTORS **	x*	
Q4001 Q4002 Q4003 Q4004 Q4005	35055312 355D2716 355K2113 355D2716 355D2716	TR 2SC2001 L TR,BA1F4M DTR UN4122(PNP 4.7K),AT TR,BA1F4M TR,BA1F4M	1 1 1
Q4006 Q4007 Q4008 Q4009 Q4011	35055312 355D2716 355K2113 355K2113 355D1931	TR 2SC2001 L TR,BA1F4M DTR UN4122(PNP 4.7K),AT DTR UN4122(PNP 4.7K),AT TR,2SC2785(E,F,H,J)AT	1 1 1 1
Q4101 Q4102 Q4103 Q4104 Q4105	355D1931 355D1931 355D2716 355K2113 355D2723	TR,2SC2T85(E,F,H,J)AT TR,2SC2T85(E,F,H,J)AT TR,BA1F4M DTR UN4122(PNP 4.7K),AT TR,BB1A3Z	1 1 1
Q4106 Q4109 Q4110 Q4111	355D2723 355D2716 355K2113 355D2716	TR,BB1A3Z TR,BA1F4M DTR UN4122(PNP 4.7K),AT TR,BA1F4M	1 1
*** DIC	DDES ***		
D4001 D4002 D4003 D4004 D4005	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1
D4101 D4102	360KA025 360KA025	DIODE ISS133 DIODE ISS133	1

MODEL : AUDIO PWB ASSY

	1	T	1
SYMBOL	PARTS NO	DESCRIPTION	QTY
*** VAF	RIABLE RESISTO	DRS ***	1.
VR4001 VR4002	41951200 41951206	R,VARIABLE 10K R,VARIABLE 100K	1
VR4101 VR4102	41951198	R.VARIABLE 4.7K R.VARIABLE 4.7K	
*** COI	LS & FILTERS	***	_!
FL4101 FL4102	61911228 61911228	LOW PASS FILTER (20K-2) LOW PASS FILTER (20K-2)	1
FL4103 FL4104	61815215	B.P.F 1.4M-07 (M) B.P.F 1.8M-07 (M)	
L4001	610E2100	FILTER COIL 822J, AT	i
L4002 L4003	610G1529 610G1529	FILTER COIL 100UH AT (S)	1 1
L4101 L4102	610G1631 610G1631	FILTER COIL 150UH AT (S) FILTER COIL 150UH AT (S)	i
L4103	61061625	FILTER COIL 47UH AT (S)	i
T4001 T4002	61911237 61911238	OSC COIL	1 1
*** RES	SISTORS ***		
R4001 R4002	401KE625 401KE705	R,CARBON 10H 5% 1/6W R,CARBON 22K 5% 1/6W	1 1
R4003 R4004	401KE678 401KE702	R, CARBON 1.6K 5% 1/6W R, CARBON 16K 5% 1/6W	
R4005	401KE695	R, CARBON 10K 5% 176W	
R4006 R4007	401KE737 401KE669	R,CARBON 470K 5% 1/6W R,CARBON 680H 5% 1/6W	1 1
R4008	401KE715	R, CARBON 56K 5% 1/6W	
R4009 R4010	401KE679 401KE745	R,CARBON 1.8K 5% 1/6W R,CARBON 1.0M 5% 1/6W	1 1
R4011	401KE687	R, CARBON 3.9K 5% 1/6W	1
R4012 R4013	401KE710 401KE704	R, CARBON 36K 5% 1/6W R, CARBON 20K 5% 1/6W	
R4014 R4015	401KE715 401KE715	R,CARBON 56K 5% 1/6W R,CARBON 56K 5% 1/6W	1 1
R4016 R4018	401KE707	R, CARBON 27K 5% 1/6W	1 !
R4018	401KE697 401KE680	R.CARBON 10K 5% 1/6W R.CARBON 2.0K 5% 1/6W	1 1

MODEL : AUDIO PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R4020	401KE672	R.CARBON 910H 5% 1/6W	1 1
R4021	401KE651	R.CARBON 120H 5% 1/6W	
R4022	401KE665	R.CARBON 470H 5% 1/6W	1 1 1
R4023	401KE671	R.CARBON 820H 5% 1/6W	
R4024	401KE705	R.CARBON 22K 5% 1/6W	
R4025	401KE705	R.CARBON 22K 5% 1/6W	
R4026	401KE609	R.CARBON 2.2H 5% 1/6W	
R4029 R4030 R4031 R4032 R4033	401KE656 401KE697 401KE697 401KE710 401KE705	R.CARBON 200H 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 36K 5% 1/6W R.CARBON 22K 5% 1/6W	1 1 1 1
R4034	401KE609	R,CARBON 2.2H 5% 1/6W	1 1 1 1
R4043	401KE697	R,CARBON 10K 5% 1/6W	
R4101	401KE725	R,CARBON 150K 5% 1/6W	
R4102	401KE725	R,CARBON 150K 5% 1/6W	
R4103	401KE725	R,CARBON 150K 5% 1/6W	
R4104	401KE725	R,CARBON 150K 5% 1/6W	1 1 1 1 1
R4107	401KE691	R,CARBON 5.6K 5% 1/6W	
R4108	401KE691	R,CARBON 5.6K 5% 1/6W	
R4109	401KE674	R,CARBON 1.1K 5% 1/6W	
R4110	401KE674	R,CARBON 1.1K 5% 1/6W	
R4111	401KE697	R,CARBON 10K 5% 1/6W	1 1 1 1
R4112	401KE697	R,CARBON 10K 5% 1/6W	
R4113	401KE680	R,CARBON 2.0K 5% 1/6W	
R4114	401KE697	R,CARBON 10K 5% 1/6W	
R4115	401KE673	R,CARBON 1.0K 5% 1/6W	
R4116	401KE673	R,CARBON 1.0K 5% 1/6W	1 1 1 1 1 1
R4117	401KE673	R,CARBON 1.0K 5% 1/6W	
R4118	401KE673	R,CARBON 1.0K 5% 1/6W	
R4119	401KE697	R,CARBON 1.0K 5% 1/6W	
R4120	401KE697	R,CARBON 1.0K 5% 1/6W	
R4121 R4123 R4124 R4125 R4126	401KE655 401KE721 401KE721 401KE667 401KE667	R.CARBON 180H 5% 1/6W R.CARBON 100K 5% 1/6W R.CARBON 100K 5% 1/6W R.CARBON 560H 5% 1/6W R.CARBON 560H 5% 1/6W	1 1 1 1
R4127	401KE697	R.CARBON 10K 5% 1/6W	1 1
R4128	401KE697	R.CARBON 10K 5% 1/6W	

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SYMBOL	PARTS NO	DESCRIPTION	QTY
R4129	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4130	401KE673	R,CARBON 1.0K 5% 1/6W	1
R4131	401KE713	R,CARBON 47K 5% 1/6W	1
*** CAP	ACITORS ***	· ·	
C4001	429G8253	C,METAL FILM 50V 1500PF	1 1 1
C4002	429G8257	C,METAL FILM 50V 3300PF	
C4004	439A1602	C,ELEC 1UF 50V	
C4005	429G8261	C,METAL FILM 50V 6800PF	
C4006	430A8114	C,ELEC 25V 4.7UF	
C4007 C4008 C4009 C4010 C4011	430A8128 430A8112 430A8128 421CB045 421CB040	C,ELEC 50V 1UF C,ELEC 16V 47UF C,ELEC 50V 1UF C,CERAMIC 50V 470PF C,CERAMIC 50V 180PF	1 1
C4012	421CB040	C,CERAMIC 50V 180PF	1 1 1
C4013	421CB043	C,CERAMIC 50V 330PF	
C4014	430A8129	C,ELEC 50V 2.2UF	
C4015	429G8267	C,METAL FILM 50V 0.022UF	
C4016	429G8265	C,METAL FILM 50V 0.015UF	
C4017	429G6549	CQ92V1H681J.AT	1 1 1
C4018	429G8261	C,METAL FILM 50V 6800PF	
C4019	439A1583	C,ELEC 10UF 16V	
C4020	430A8114	C,ELEC 25V 4.7UF	
C4021	430A8113	C,ELEC 16V 100UF	
C4022	430A8111	C,ELEC 16V 33UF	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C4023	430A8110	C,ELEC 16V 22UF	
C4024	421CB049	C,CERAMIC 50V 1000PF	
C4025	421CB461	C,CERAMIC 16V 0.01UF	
C4026	421CB041	C,CERAMIC 50V 220PF	
C4027	429G8614	C,FILM 100V 0.039UF	1 1 1
C4028	423A1045	C,CERAMIC 50V 100PF	
C4029	421A0433	C,CERAMIC 50V 0.047UF	
C4030	429G8265	C,METAL FILM 50V 0.015UF	
C4031	421CB047	C,CERAMIC 50V 680PF	
C4032 C4033 C4034 C4101 C4102	421CB461 429G8611 430A8110 439A2031 439A2031	C.CERAMIC 16V 0.01UF C.FILM 100V 0.022UF C.ELEC 16V 22UF C.ELEC 50V 1UF C.ELEC 50V 1UF	1 1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4103	439A2031	C,ELEC 50V 1UF	1 1 1 1 1 1 1
C4104	439A2031	C,ELEC 50V 1UF	
C4105	439A2028	C,ELEC 50V 0.33UF	
C4106	439A2033	C,ELEC 50V 2.2UF	
C4107	439A2005	C,ELEC 16V 47UF	
C4108 C4109 C4110 C4115	439A2005 439A2031 439A2031 439A2005 439A2005	C,ELEC 16V 47UF C,ELEC 50V 1UF C,ELEC 50V 1UF C,ELEC 16V 47UF C,ELEC 16V 47UF	1 1 1 1 1 1 1 1
C4117	429G8255	C,METAL FILM 50V 2200PF	1 1 1 1 1 1
C4118	429G8255	C,METAL FILM 50V 2200PF	
C4119	439A2001	C,ELEC 16V 10UF	
C4120	439A2001	C,ELEC 16V 10UF	
C4121	429G8263	C,METAL FILM 50V 0.01UF	
C4122	429G8263	C,METAL FILM 50V 0.01UF	1 1 1 1 1 1
C4123	439A2013	C,ELEC 25V 33UF	
C4124	439A2013	C,ELEC 25V 33UF	
C4125	439A2018	C,ELEC 35V 4.7UF	
C4126	439A2018	C,ELEC 35V 4.7UF	
C4127	429G8267	C,METAL FILM 50V 0.022UF	1 1 1 1 1 1 1
C4128	429G8267	C,METAL FILM 50V 0.022UF	
C4129	439A2003	C,ELEC 16V 22UF	
C4130	439A2003	C,ELEC 16V 22UF	
C4131	43911525	C,ELEC 50V 47UF A(AWD)	
C4132	439A2005	C,ELEC 16V 47UF	1 1 1 1 1
C4133	43911525	C,ELEC 50V 47UF A(AWD)	
C4134	439A2005	C,ELEC 16V 47UF	
C4135	439A2003	C,ELEC 16V 22UF	
C4136	439A2003	C,ELEC 16V 22UF	
C4137	439A2005	C,ELEC 16V 47UF	1
C4138	429G8252	C,METAL FILM 50V 1200PF	1
C4139	439A2018	C,ELEC 35V 4.7UF	1
C4140	439A2009	C,ELEC 25V 6.8UF	1
C4141	439A2005	C,ELEC 16V 47UF	1
C4143 C4144 C4145 C4146	439A2018 439A2018 421CB034 421CB027	C.ELEC 35V 4.7UF C.ELEC 35V 4.7UF C.CERAMIC 50V 75 PF C.CERAMIC 50V 39 PF	1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4147	421CB037	C.CERAMIC 50V 100PF	1
C4148 C4149	439A2005 439A2005	C.ELEC 16V 47UF C.ELEC 16V 47UF	1

MODEL : H.P/VIDEO SW PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	} ***		1,
1C4151 1C4152 1C4201	37101322 37901081 37101159	IC M5222L (VOL) IC M5218 L(SIP) LA7016 ANALOG SW	1 1
*** TR/	ANSISTORS *	**	
Q4151 Q4152 Q4201 Q4202 Q4203	355D2723 355D2723 35902911 35902911 35902911	TR,BB1A3Z TR,BB1A3Z TR,2SA 952 K TR,2SA 952 K TR,2SA 952 K	1 1 1
Q4205 Q4206 Q4207 Q4208 Q4209	355D1931 355D1931 355D1931 355D1931 35902911	TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SA 952 K	1 1 1
Q4210 Q4211 Q4212 Q4213 Q4214	355D2716 355D2716 355D2716 355D2716 355K2110	TR,BA1F4M TR,BA1F4M TR,BA1F4M TR,BA1F4M TR,BA1F4M TR,BN1F4M(A,22K)AT	1 1 1 1
Q4215 Q4216 Q4217	355D2716 355K2113 35541931	TR,BA1F4M DTR UN4122(PNP 4.7K),AT TR,2SC2785(E,F,H,J)	1 1 1
*** DIC	DES ***		
D4151	360KA025	DIODE 1SS133	1
*** COI	LS & FILTERS	***	
L4203	61071821	FILTER COIL 0405 22UH	1
*** RES	ISTORS ***		
R4151 R4152 R4153 R4154 R4155	401KE697 401KE697 401KE704 401KE704 401KE712	R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 20K 5% 1/6W R,CARBON 20K 5% 1/6W R,CARBON 43K 5% 1/6W	1 1 1 1 1
R4156 R4157	401KE708 401KE708	R,CARBON 30K 5% 1/6W R,CARBON 30K 5% 1/6W	1 1

SYMBOL.	PARTS NO	DESCRIPTION	QTY
R4158	401KE710 401KE697	R,CARBON 36K 5% 1/6W R,CARBON 10K 5% 1/6W	1 1
R4159 R4160	401KE697	R, CARBON 10K 5% 1/6W	i
R4161	401KE685	R,CARBON 3.3K 5% 1/6W	1 1 1 1
R4162	401KE685	R,CARBON 3.3K 5% 1/6W	
R4163	401KE697	R,CARBON 10K 5% 1/6W	
R4164	401KE697	R,CARBON 10K 5% 1/6W	
R4165	401KE651	R,CARBON 120H 5% 1/6W	
R4166	401KE651	R,CARBON 120H 5% 1/6W	1 1 1 1 1
R4201	40185665	R.CARBON 470H 5% 1/2W	
R4203	401KE717	R,CARBON 68K 5% 1/6W	
R4204	401KE703	R,CARBON 18K 5% 1/6W	
R4205	401KE717	R,CARBON 68K 5% 1/6W	
R4207	401KE703	R.CARBON 18K 5% 1/6W	1 1 1
R4208	409HB673	R.CARBON 1.0K 5% 1/4W	
R4212	409HB673	R.CARBON 1.0K 5% 1/4W	
R4219	401KE673	R.CARBON 1.0K 5% 1/6W	
R4220	401KE670	R.CARBON 750H 5% 1/6W	
R4221 R4222 R4223 R4224 R4225	401KE673 401KE678 401KE721 401KE673 401KE681	R,CARBON 1.0K 5% 1/6W R,CARBON 1.6K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 2.2K 5% 1/6W	1 1 1 1
R4226	401KE679	R,CARBON 1.8K 5% 1/6W	1 1 1 1 1
R4231	40121157	R,CARBON 220H 5% 1/2W	
R4232	401KE649	R,CARBON 100H 5% 1/6W	
R4232	401KE670	R,CARBON 750H 5% 1/6W	
R4233	401KE670	R,CARBON 750H 5% 1/6W	
R4234	401KE729	R,CARBON 220K 5% 1/6W	1 1
R4235	401KE646	R,CARBON 75H 5% 1/6W	
*** CAF	PACITORS **	k	
C4151	439A2033	C,ELEC 50V 2.2UF	1 1 1 1 1
C4152	439A2033	C,ELEC 50V 2.2UF	
C4153	439A2003	C,ELEC 16V 22UF	
C4154	439A2031	C,ELEC 50V 1UF	
C4155	439A2005	C,ELEC 16V 47UF	
C4156	439A2005	C.ELEC 16V 47UF	1 1
C4157	439A2003	C.ELEC 16V 22UF	

SYMBOL	PARTS NO	DESCRIPTION	QTY
C4158 C4159 C4160	439A2003 439A2005 439A2005	C.ELEC 16V 22UF C.ELEC 16V 47UF C.ELEC 16V 47UF	1 1 1
C4201 C4202 C4203 C4204 C4206	43983307 43088112 42180425 4290333 4290333	C,ELEC 6.3V 1000UF C,ELEC 16V 47UF C,CERAMIC 50V 0.01UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF	1 1 1 1
C4208 C4209 C4210 C4211 C4212	421CB461 430A8113 430A8104 421CB461 430A8109	C,CERAMIC 16V 0.01UF C,ELEC 16V 100UF C,ELEC 6.3V 100UF C,CERAMIC 16V 0.01UF C,ELEC 16V 10UF	1 1 1
C4213 C4214 C4215 C4216	430A8109 430A8109 43983307 421CB031	C,ELEC 16V 10UF C,ELEC 16V 10UF C,ELEC 6.3V 1000UF C,CERAMIC 50V 56 PF	1 1 1

MODEL : TIMER/FUNC PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		
1C2001	37151473	MOSUPD75216ACW-202DX4000T	1
1C2003	37101286	IC M5278L56	
1C2004	37151457	IC MSC1124RS (VU DRIVER)	
*** TRA	NSISTORS **	**	
02001 02002 02003 02015 02021	355K2120 355D2716 355D2716 355K2110 355K2110	DTA124TS,AT(A,22K) TR,BA1F4M TR,BA1F4M TR,BN1F4M(A,22K)AT TR,BN1F4M(A,22K)AT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Q2022	355K2110	TR,BN1F4M(A,22K)AT	1 1 1
Q2023	355K2110	TR,BN1F4M(A,22K)AT	
Q2032	355B1117	TR,2SB1238 (Q) AT	
*** DIC	DES ***		
D2001	360KA025	DIODE 1SS133	1 1 1 1 1
D2002	360KA025	DIODE 1SS133	
D2003	360KA025	DIODE 1SS133	
D2004	360KA025	DIODE 1SS133	
D2005	360KA025	DIODE 1SS133	
D2007	360KA025	DIODE 1SS133	1
D2008	360KA025	DIODE 1SS133	1
D2009	360KA025	DIODE 1SS133	1
D2010	360KA025	DIODE 1SS133	1
D2011	360KA025	DIODE 1SS133	1
D2012 D2013 D2014 D2015 D2017	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1 1 1
D2018	360KA025	DIODE 1SS133	1 1 1 1
D2019	360KA025	DIODE 1SS133	
D2020	360KA025	DIODE 1SS133	
D2023	360KA025	DIODE 1SS133	
D2025	360KA025	DIODE 1SS133	
D2030	360KA025	DIODE 1SS133	1
D2041	360KA025	DIODE 1SS133	1
D2042	360KA025	DIODE 1SS133	1

MODEL : TIMER/FUNC PWB ASSY

WODET : LIMEK/LANC LARR W221				
SYMBOL	PARTS NO	DESCRIPTION	QTY	
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D2043 D2046	360KA025 360KA025	DIODE 1SS133 DIODE 1SS133	1	
LD2003 LD2004 ZD2001 ZD2002 ZD2003	36904276 36904263 369KE492 369KE474 369KE521	LED UMB SLR-34DC(N.P) LED RED SLR-34VC3 ZENER DIODE RD9.1JSB3AT26 ZENER DIODE RD5.1JSB3AT26 ZENER DIODE RD24JSB2,AT26	1 1 1 1	
ZD2004 ZD2006	369KE526 369KE482	ZENER DIODE RD30JSB1,AT26 ZENER DIODE RD6.8JSB2AT26	1	
*** VAF	RIABLE RESISTO	DRS ***		
VR2001	41504208	VR 10K-B (L=17.5)	1	
*** REL	AYS & SWITCHE	S ***		
SW2050 SW2051 SW2052 SW2055 SW2056	65180052 65180052 65180092 65180052 65180052	SLIDE SW 1-1-2 SLIDE SW 1-1-2 SLIDE SW 4-2 (H=17) SLIDE SW 1-1-2 SLIDE SW 1-1-2	1 1 1 1	
*** ELE	CTRICAL PARTS	& MISCELLANE OUS PARTS	***	
FD2001 JK2001 JK2002 X2001 X2002	67930096 70905730 70905764 39080023 64004151	FIP16QM6 HEAD PHONE JACK 1406 (2) RCA 3P JACK (GOLD) 4.19MHZ RESONATOR X'TAL 32.768KHZ	1 1 1 1 1 1	
X2003	64004139	50HZ OSCILLATOR LQT-50X-1	1	
*** RES	ISTORS ***			
R2001 R2002 R2003 R2004 R2005	401KE649 401KE733 401KE738 401KE697 401KE717	R.CARBON 100H 5% 1/6W R.CARBON 330K 5% 1/6W R.CARBON 510K 5% 1/6W R.CARBON 10K 5% 1/6W R.CARBON 68K 5% 1/6W	1 1 1 1	
R2006 R2008 R2009 R2010 R2011	401KE685 401KE721 401KE697 401KE697 401KE697	R,CARBON 3.3K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W	1 1 1 1	

MODEL: SUB FUNCTION PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
R2012	401KE697	R,CARBON 10K 5% 1/6W	1 1 1 1 1
R2014	401KE729	R,CARBON 220K 5% 1/6W	
R2015	401KE697	R,CARBON 10K 5% 1/6W	
R2016	401KE721	R,CARBON 100K 5% 1/6W	
R2017	401KE721	R,CARBON 100K 5% 1/6W	
R2021	401KE677	R,CARBON 1.5K 5% 1/6W	1 1 1
R2022	401KE677	R,CARBON 1.5K 5% 1/6W	
R2027	401KE697	R,CARBON 10K 5% 1/6W	
R2036	401KE657	R,CARBON 220H 5% 1/6W	
R2037	401KE657	R,CARBON 220H 5% 1/6W	
R2040 R2042 R2053 R2058 R2060	401KE717 401KE729 401KE697 401KE721 401KE681	R,CARBON 68K 5% 1/6W R,CARBON 220K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 2.2K 5% 1/6W	1 1 1 1
R2061	401KE690	R,CARBON 5.1K 5% 1/6W	1 1 1 1
R2066	409HB649	R,CARBON 100H 5% 1/4W	
R2067	409HB649	R,CARBON 100H 5% 1/4W	
R2068	401KE685	R,CARBON 3.3K 5% 1/6W	
R2069	401KE681	R,CARBON 2.2K 5% 1/6W	
R2070	401KE681	R,CARBON 2.2K 5% 1/6W	1 1 1 1
R2072	401KE721	R,CARBON 100K 5% 1/6W	
R2073	401KE721	R,CARBON 100K 5% 1/6W	
R2076	401KE673	R,CARBON 1.0K 5% 1/6W	
R2077	401KE661	R,CARBON 330H 5% 1/6W	
R2078	401KE699	R,CARBON 12K 5% 1/6W	1
R2079	401KE697	R,CARBON 10K 5% 1/6W	
*** CA	PACITORS **	*	
C2001 C2002 C2003 C2004 C2005	430A8109 430A8124 421CB862 430A8351 430A8318	C,ELEC 16V 10UF C,ELEC 50V 0.1UF C,CERAMIC 25V 0.01UF C,ELEC 50V 3.3UF C,ELEC 16V 10UF	1 1 1 1
C2006 C2007 C2008 C2009 C2010	421CB863 421CB237 421CB237 421CB237 421CB237	C,CERAMIC 25V 0.022UF C,CERAMIC 50V 100PF C,CERAMIC 50V 100PF C,CERAMIC 50V 100PF C,CERAMIC 50V 100PF	1 1 1 1

MODEL : TIMER/FUNC PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C2012	421CB029	C,CERAMIC 50V 47 PF	1 1 1 1
C2013	421CB029	C,CERAMIC 50V 47 PF	
C2014	430A8109	C,ELEC 16V 10UF	
C2015	421CB863	C,CERAMIC 25V 0.022UF	
C2016	421CB863	C,CERAMIC 25V 0.022UF	
C2017	430A8348	C,ELEC 50V 1UF C,ELEC 50V 1UF C,CERAMIC 50V 100PF C,CERAMIC 50V 100PF C,CERAMIC 50V 100PF	1
C2018	430A8348		1
C2029	421CB237		1
C2030	421CB237		1
C2033	421CB237		1
C2034 C2036 C2037 C2040 C2043	430A8326 430A8348 430A8348 421CB461 421CB461	C,ELEC 25V 4.7UF C,ELEC 50V 1UF C,ELEC 50V 1UF C,CERAMIC 16V 0.01UF C,CERAMIC 16V 0.01UF	1 1 1 1
C2044	42121055	C,CERAMIC 50V 220PF	1
C2045	42121055	C,CERAMIC 50V 220PF	1
C2046	421CB237	C,CERAMIC 50V 100PF	1
C2047	42311100	C,CERAMIC 50V 390PF	1
C2048	42311100	C,CERAMIC 50V 390PF	1

MODEL : SUB FUNCTION PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY	
*** TRA	NSISTORS **	**		
Q2025 Q2026 Q2027	355K2110 355D2716 355D2716	TR,BN1F4M(A,22K)AT TR,BA1F4M TR,BA1F4M	1 1 1	
*** DIC	DES ***			
D2006 D2044 D2045	360KA009 360KA009 360KA009	DIODE 1S2473 AT26 DIODE 1S2473 AT26 DIODE 1S2473 AT26	1 1 1	
*** VAF	HABLE RESISTO	PRS ***		
VR2002 VR2003 VR2004	41504196 41504204 41504205	SLIDE VR RS30B 30MM 5KAX2 VR 20K-B (L=17.5) VR 500K-B (L=17.5)	1 1 1	
*** REL	AYS & SWITCHE	S ***		
SW2026 SW2035 SW2038 SW2053 SW2054	65330070 65330070 65330071 65180052 65330067	TACT SW SKECAD TACT SW SKECAD TACT SWITCH EVQ-PAE-05R SLIDE SW 1-1-2 PUSH SW SPPH2 (TYPE-A)	1 1	
*** ELE	CTRICAL PARTS	& MISCELLANE OUS PARTS	***	
U2001	79539009	IR RECIEVER SBX-1483-55	1	
*** RES	ISTORS ***			
R2024 R2074 R2075	409HB729 409HB665 409HB665	R,CARBON 220K 5% 1/4W R,CARBON 470H 5% 1/4W R,CARBON 470H 5% 1/4W	1 1 1	
*** CAPACITORS ***				
C2024	43920009	SUPER CAPASITOR FSOH104Z	1	

MODEL : TUNER/IF PWB ASSY

	SYMBOL	PARTS NO	DESCRIPTION	QTY
	*** CR	T & TUNER *:	<u> </u>	
		34393026	U/V TUNER	1
	*** IC	S ***		
	1 C3001 1 C3002 1 C3003 1 C3004 1 C3005	37101328 37903162 37101284 37101127 37151428	IC M51365SP(PLL VIF/SIF) IC LA7910 (X0260C) IC LA7210 IC UPC-393C MOS M6M80021P (E2PROM 2K)	1 1 1 1
	ZD3001	37101436	IC UPC574J(MB)	1
	*** TR	ANSISTORS **	**	
	TR3001 TR3002 TR3003 TR3004 TR3005	35940502 355D1931 355D1931 35940502 35055312	TR,2SC1730 L TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC1730 L TR 2SC2001 L	1 1 1 1
	TR3006 TR3007 TR3008 TR3009	355K1131 355D2711 35058012 355D2711	TR.2SA1175 (E.F.H.J) DTC144ES.AT TR 2SC2352 L DTC144ES.AT	1 1 1
	*** DI	ODES ***		
	D3002 D3003 D3004 D3005 D3006	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1
	ZD3002	369KE494	ZENER DIODE RD10JSB2,AT26	1
	*** VA	RIABLE RESISTO	ORS ***	
	VR3101	41951194	R.VARIABLE 1K	1
	*** CO	ILS & FILTERS	***	y
-	FL3001 FL3003 FL3004 L3001 L3002	61138023 61137037 61138024 61061809 61011533	VIF SAWF SAF38.9MZR72Z CERAMIC TRAP TPS5.5MW SAWF SAF33.4MC70Z FILTER COIL 0405 2.2UH,AT SAW COIL 2R2	1 1 1 1
			,	

SYMBOL	PARTS NO	DESCRIPTION	QTY
L3003 L3009 L3010 L3011 L3012	610G2776 610G2922 610G2912 610G2908 610G2932	COIL FILTER FILTER COIL ELEXT150KA FILTER COIL ELEXT 2R2MA FILTER COIL FILTER COIL ELEXT 101KA	1 1 1 1
L3013 L3014 T3001 T3002 T3003	610G2920 610G2920 61815201 61815209 61815209	FILTER COIL ELEXT100KA FILTER COIL ELEXT100KA VCO COIL (PAL) VIF-T(9.5T,CH) VIF-T(9.5T,CH)	1 1 1 1
*** EL	CTRICAL PARTS	S & MISCELLANE OUS PARTS	***
X3001	70780001 39080012	CABLE, CONNECTOR (150MM) CERAMIC RESO, CSB500E5	1
*** RES	SISTORS ***	J	I
R3001 R3002 R3003 R3004 R3005	401KE649 401KE695 401KE681 401KE641 401KE649	R,CARBON 100H 5% 1/6W R,CARBON 8.2K 5% 1/6W R,CARBON 2.2K 5% 1/6W R,CARBON 47H 5% 1/6W R,CARBON 100H 5% 1/6W	1 1 1 1
R3006 R3007 R3009 R3010 R3011	401KE655 401KE669 401KE673 401KE705 401KE691	R,CARBON 180H 5% 1/6W R,CARBON 680H 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 22K 5% 1/6W R,CARBON 5.6K 5% 1/6W	1 1 1 1
R3012 R3013 R3014 R3015 R3016	401KE686 401KE681 401KE693 401KE671 401KE743	R,CARBON 3.6K 5% 1/6W R,CARBON 2.2K 5% 1/6W R,CARBON 6.8K 5% 1/6W R,CARBON 820H 5% 1/6W R,CARBON 820K 5% 1/6W	1 1 1 1
R3017 R3020 R3021 R3022 R3023	401KE689 401KE673 401KE653 401KE674 401KE657	R,CARBON 4.7K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 150H 5% 1/6W R,CARBON 1.1K 5% 1/6W R,CARBON 220H 5% 1/6W	1 1 1
R3024 R3027 R3029	401KE646 401KE681 401KE733	R.CARBON 75H 5% 1/6W R.CARBON 2.2K 5% 1/6W R.CARBON 330K 5% 1/6W	1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3033	401KE641	R.CARBON 47H 5% 1/6W	1 1
R3034	401KE667	R.CARBON 560H 5% 1/6W	
R3035	401KE673	R.CARBON 1.0K 5% 1/6W	1 1 1 1 1 1 1 1
R3036	401KE661	R.CARBON 330H 5% 1/6W	
R3040	401KE641	R.CARBON 47H 5% 1/6W	
R3041	401KE669	R.CARBON 680H 5% 1/6W	
R3043	401KE649	R.CARBON 100H 5% 1/6W	
R3045 R3046 R3047 R3050 R3051	40913109 40913109 40913109 401KE661 401KE687	R,CARBON 2.2H 5% 1/4W R,CARBON 2.2H 5% 1/4W R,CARBON 2.2H 5% 1/4W R,CARBON 330H 5% 1/6W R,CARBON 3.9K 5% 1/6W	1 1 1 1
R3052	401KE721	R.CARBON 100K 5% 1/6W	1 1 1 1 1 1
R3053	401KE721	R.CARBON 100K 5% 1/6W	
R3054	401KE705	R.CARBON 22K 5% 1/6W	
R3055	401KE705	R.CARBON 22K 5% 1/6W	
R3056	401KE721	R.CARBON 100K 5% 1/6W	
R3057	401KE684	R,CARBON 3.0K 5% 1/6W	1
R3058	401KE679	R,CARBON 1.8K 5% 1/6W	1
R3059	401KE713	R,CARBON 47K 5% 1/6W	1
R3063	40351182	R,METAL 2.4K 5% 1W	1
R3064	401KE697	R,CARBON 10K 5% 1/6W	1
R3065	401KE697	R,CARBON 10K 5% 1/6W	1
R3066	401KE705	R,CARBON 22K 5% 1/6W	1
R3067	401KE703	R,CARBON 18K 5% 1/6W	1
R3068	401KE703	R,CARBON 18K 5% 1/6W	1
R3069	401KE703	R,CARBON 18K 5% 1/6W	1
R3070 R3073 R3074 R3075 R3076	40809989 401KE675 401KE701 401KE661 401KE733	R,FUSE 2.2H 5% 1/4W R,CARBON 1.2K 5% 1/6W R,CARBON 15K 5% 1/6W R,CARBON 330H 5% 1/6W R,CARBON 330K 5% 1/6W	1 1 1 1
R3077	401KE717	R,CARBON 68K 5% 1/6W	1 1 1 1 1 1 1
R3078	401KE703	R,CARBON 18K 5% 1/6W	
R3079	40913109	R,CARBON 2.2H 5% 1/4W	
R3080	401KE697	R,CARBON 10K 5% 1/6W	
R3081	401KE725	R,CARBON 150K 5% 1/6W	
R3082	401KE727	R.CARBON 180K 5% 1/6W	1
R3083	401KE681	R.CARBON 2.2K 5% 1/6W	

MODEL : 7	UNER/IF PWB	ASSY	
SYMBOL	PARTS NO	DESCRIPTION	QTY
R3084 R3085 R3086	401KE681 401KE681 401KE729	R,CARBON 2.2K 5% 1/6W R,CARBON 2.2K 5% 1/6W R,CARBON 220K 5% 1/6W	1 1 1
R3087 R3088 R3089 R3090 R3092	401KE729 401KE689 401KE689 401KE697 401KE683	R,CARBON 220K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 2.7K 5% 1/6W	1 1 1 1 1
R3093 R3097 R3099 R3100	401KE673 401KE673 401KE721 401KE693	R,CARBON 1.0K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 100K 5% 1/6W R,CARBON 6.8K 5% 1/6W	1 1 1
*** CAP	ACITORS **:	*	
C3001	421CB862	C,CERAMIC 25V 0.01UF	1

C3001 C3002 C3003 C3004 C3005	421CB862 421CB862 421CB862 421CB862 421CB862	C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF	1 1 1 1
C3007 C3008 C3009 C3010 C3011	430A8131 423A2037 423A2012 430A8127 430A8112	C,ELEC 50V 4.7UF C,CERAMIC 50V 47PF C.CERAMIC 50V 7PF C,ELEC 50V 0.47UF C,ELEC 16V 47UF	1 1 1 1
C3012 C3015 C3016 C3017 C3018	421CB862 430A8110 429G8269 430A8128 430A8112	C.CERAMIC 25V 0.01UF C.ELEC 16V 22UF C.METAL FILM 50V 0.033UF C.ELEC 50V 1UF C.ELEC 16V 47UF	1 1 1
C3019 C3020 C3021 C3022 C3024	421CB862 430A8114 423A6041 423A6003 421CB862	C,CERAMIC 25V 0.01UF C,ELEC 25V 4.7UF C,CERAMIC 50V 68PF C,CERAMIC 50V 3PF C,CERAMIC 25V 0.01UF	1 1 1 1
C3025 C3029 C3030 C3031 C3033	430A8112 421CB862 421CB862 421CB862 423A3029	C,ELEC 16V 47UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C.CERAMIC 50V 18PF	1 1 1 1
C3034	423A2015	C.CERAMIC 50V 10PF	1

MODEL : TUNER/IF PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C3035	430A8110	C.ELEC 16V 22UF	1 1
C3036	421CB862	C.CERAMIC 25V 0.01UF	
C3037	430A8128	C.ELEC 50V 1UF	
C3038	43983367	C.ELEC 50V 47UF	
C3039 C3040 C3041 C3042 C3043	429G6917 429G6917 429G6917 421CB049 421CB043	C,METAL FILM 50V 0.22UF C,METAL FILM 50V 0.22UF C,METAL FILM 50V 0.22UF C,CERAMIC 50V 1000PF C,CERAMIC 50V 330PF	1 1 1 1
C3044	430A8127	C,ELEC 50V 0.47UF	1 1 1 1
·C3050	430A8126	C,ELEC 50V 0.33UF	
C3051	421CB049	C,CERAMIC 50V 1000PF	
C3052	430A8127	C,ELEC 50V 0.47UF	
C3054	430A8110	C,ELEC 16V 22UF	
C3056 C3057 C3059 C3065 C3070	430A8112 421CB049 430A8128 430A8128 421CB862	C,ELEC 16V 47UF C,CERAMIC 50V 1000PF C,ELEC 50V 1UF C,ELEC 50V 1UF C,CERAMIC 25V 0.01UF	1 1 1 1
C3071	423A2003	C.CERAMIC 50V 3PF	1 1
C3072	423A6039	C.CERAMIC 50V 56PF	

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		
103601 103602 103603 103604 103605	37001034 37001034 37101180 37904017 37051378	IC UPC1382C IC UPC1382C IC UPC358C MOS UPD4081 MOS UPD4053BC (MPX)	1 1 1
103606	37901159	IC M5218 P (DIP)	1
*** TRA	NSISTORS *	**	
TR3601 TR3602 TR3603 TR3604 TR3606	355D1931 355D1931 35990812 355D1931 355K2105	TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SK163L TR,2SC2785(E,F,H,J)AT DTA144ES,AT	1 1 1 1
TR3607 TR3608 TR3609 TR3610 TR3611	355D2711 355K2105 355D1931 355D1931 355D1931	DTC144ES,AT DTA144ES,AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT TR,2SC2785(E,F,H,J)AT	1 1 1
TR3612	355D1931	TR,2SC2785(E,F,H,J)AT	1
*** DIC	DES ***		
D3601 D3602 D3603 D3605 D3606	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1 1 1
D3607 D3608 D3610 D3611 D3613	360KA025 360KA025 360KA025 360KA025 360KA025	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	1 1 1
ZD3601	369KE491	ZENER DIODE RD9.1JSB2AT26	1
*** VAF	HABLE RESIST	ORS ***	
VR3601 VR3602 VR3603 VR3604	41951204 41951198 41952308 41952308	R,VARIABLE 47K R,VARIABLE 4.7K VR 200H VR6CK-PH1S VR 200H VR6CK-PH1S	1 1 1 1

MODEL : DECODER PWB ASSY

	SYMBOL	PARTS NO	DESCRIPTION	QTY
L	*** COI	LS & FILTERS	***	
	FL3601 FL3602 FL3603 FL3604 L3601	61105021 61105022 611A2012 611C7050 61091014	SIF FILTER SFT 5.5MA SIF FILTER SFT 5.74MA CERAMIC DISCRIMINATER CERAMIC DISCRIMINATER FILTER COIL 183	1 1 1 1 1
	T3603 T3604 T3605	61804009 61827060 61827060	3.5FH DET COIL LPF 15.75KHZ,31.5KHZ 7MM LPF 15.75KHZ,31.5KHZ 7MM	1 1
-	*** RES	SISTORS ***		
	R3601 R3602 R3604 R3605 R3606	401KE665 401KE673 401KE665 401KE691 401KE705	R.CARBON 470H 5% 1/6W R.CARBON 1.0K 5% 1/6W R.CARBON 470H 5% 1/6W R.CARBON 5.6K 5% 1/6W R.CARBON 22K 5% 1/6W	1 1 1 1 1
	R3607 R3608 R3609 R3610 R3611	401KE705 401KE745 40913117 401KE665 401KE673	R.CARBON 22K 5% 1/6W R.CARBON 1.0M 5% 1/6W R.CARBON 4.7H 5% 1/4W R.CARBON 470H 5% 1/6W R.CARBON 1.0K 5% 1/6W	1 1 1 1 1 1
	R3613 R3614 R3615 R3616 R3617	401KE665 401KE691 401KE705 40913117 401KE649	R,CARBON 470H 5% 1/6W R,CARBON 5.6K 5% 1/6W R,CARBON 22K 5% 1/6W R,CARBON 4.7H 5% 1/4W R,CARBON 100H 5% 1/6W	1 1
	R3618 R3619 R3620 R3621 R3622	401KE679 401KE671 401KE685 401KE729 401KE681	R,CARBON 1.8K 5% 1/6W R,CARBON 820H 5% 1/6W R,CARBON 3.3K 5% 1/6W R,CARBON 220K 5% 1/6W R,CARBON 2.2K 5% 1/6W	1 1 1 1
	R3623 R3624 R3625 R3626 R3627	401KE745 401KE691 40913117 401KE649 401KE721	R,CARBON 1.0M 5% 1/6W R,CARBON 5.6K 5% 1/6W R,CARBON 4.7H 5% 1/4W R,CARBON 100H 5% 1/6W R,CARBON 100K 5% 1/6W	1 1 1 1 1
	R3628 R3629 R3630	401KE695 401KE673 401KE693	R,CARBON 8.2K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 6.8K 5% 1/6W	***

SYMBOL	PARTS NO	DESCRIPTION	QTY
R3631	401KE717	R,CARBON 68K 5% 1/6W	1 1
R3632	401KE721	R,CARBON 100K 5% 1/6W	
R3633	404CA649	R,METAL 100H 1% 1/6W	1 1 1 1 1
R3634	404CA744	R,METAL 910K 1% 1/6W	
R3635	401KE721	R,CARBON 100K 5% 1/6W	
R3636	401KE681	R,CARBON 2.2K 5% 1/6W	
R3637	401KE681	R,CARBON 2.2K 5% 1/6W	
R3638	401KE721	R,CARBON 100K 5% 1/6W	1 1 1 1 1 1
R3639	404CA651	R,METAL 120H 1% 1/6W	
R3640	404CA745	R,METAL 1M 5% 1/6W	
R3641	401KE721	R,CARBON 100K 5% 1/6W	
R3642	40913117	R,CARBON 4.7H 5% 1/4W	
R3643	401KE729	R,CARBON 220K 5% 1/6W	
R3644	401KE729	R,CARBON 220K 5% 1/6W	
R3645	40913165	R,CARBON 470H 5% 1/4W	
R3646	401KE705	R,CARBON 22K 5% 1/6W	
R3647	401KE705	R,CARBON 22K 5% 1/6W	
R3649	401KE705	R,CARBON 22K 5% 1/6W	1 1 1 1 1 1
R3650	401KE705	R,CARBON 22K 5% 1/6W	
R3652	401KE703	R,CARBON 18K 5% 1/6W	
R3653	401KE721	R,CARBON 100K 5% 1/6W	
R3654	401KE681	R,CARBON 2.2K 5% 1/6W	
R3655	401KE735	R.CARBON 390K 5% 1/6W	1 1 1 1 1 1
R3656	401KE735	R.CARBON 390K 5% 1/6W	
R3657	401KE725	R.CARBON 150K 5% 1/6W	
R3658	401KE709	R.CARBON 33K 5% 1/6W	
R3659	401KE730	R.CARBON 240K 5% 1/6W	
R3660	401KE709	R,CARBON 33K 5% 1/6W	1 1 1 1 1 1 1
R3661	401KE723	R,CARBON 120K 5% 1/6W	
R3662	401KE730	R,CARBON 240K 5% 1/6W	
R3663	401KE723	R,CARBON 120K 5% 1/6W	
R3664	401KE721	R,CARBON 100K 5% 1/6W	
R3665	401KE721	R.CARBON 100K 5% 1/6W	1 1 1 1 1 1
R3666	401KE721	R.CARBON 100K 5% 1/6W	
R3667	401KE673	R.CARBON 1.0K 5% 1/6W	
R3668	401KE673	R.CARBON 1.0K 5% 1/6W	
R3669	40913117	R.CARBON 4.7H 5% 1/4W	
R3670	401KE705	R,CARBON 22K 5% 1/6W	1 1
R3671	401KE705	R,CARBON 22K 5% 1/6W	

MODEL : DECODER LAR W221				
SYMBOL	PARTS NO	DESCRIPTION	QTY	
	· · · · · · · · · · · · · · · · · · ·		· ·	
R3672 R3673 R3674	401KE697 401KE697 401KE681	R,CARBON 10K 5% 1/6W R,CARBON 10K 5% 1/6W R,CARBON 2.2K 5% 1/6W	1 1	
R3675 R3676 R3677 R3678 R3679	401KE681 401KE705 401KE671 401KE684 401KE671	R.CARBON 2.2K 5% 1/6W R.CARBON 22K 5% 1/6W R.CARBON 82OH 5% 1/6W R.CARBON 3.0K 5% 1/6W R.CARBON 82OH 5% 1/6W	1 1 1 1	
R3680 R3681 R3682 R3683 R3684	401KE684 401KE657 401KE657 401KE677 404CA657	R,CARBON 3.0K 5% 1/6W R,CARBON 220H 5% 1/6W R,CARBON 220H 5% 1/6W R,CARBON 1.5K 5% 1/6W R,METAL 220H 1% 1/6W	1 1 1 1	
R3685	404CA657	R.METAL 220H 1% 1/6W	1	
*** CAF	ACITORS ***	k		
C3601 C3602 C3603 C3604 C3605	439J3060 421CB862 421CB862 439J3060 429G8264	C,ELEC 50V 1.0UF C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,ELEC 50V 1.0UF C,METAL FILM 50V 0.012UF	1 1 1 1	
C3606 C3607 C3608 C3609 C3610	439J3062 439J3025 430A8110 439J3027 421CB862	C,ELEC 50V 3.3UF C,ELEC 16V 22UF C,ELEC 16V 22UF C,ELEC 16V 47UF C,CERAMIC 25V 0.01UF	1 1 1 1	
C3611 C3612 C3613 C3614 C3615	421CB862 421CB862 439J3060 429G8264 439J3062	C,CERAMIC 25V 0.01UF C,CERAMIC 25V 0.01UF C,ELEC 50V 1.0UF C,METAL FILM 50V 0.012UF C,ELEC 50V 3.3UF	1 1 1 1	
C3616 C3617 C3618 C3619 C3620	430A8110 439J3025 439J3027 421CB862 421CB045	C.ELEC 16V 22UF C.ELEC 16V 22UF C.ELEC 16V 47UF C.CERAMIC 25V D.01UF C.CERAMIC 50V 470PF	1 1 1 1 1 1 1 1 1 1	
C3621 C3622 C3623	421CB862 421CB045 421CB045	C,CERAMIC 25V 0.01UF C,CERAMIC 50V 470PF C,CERAMIC 50V 470PF	1 1 1	

MODEL : DECODER PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C3624	430A8109	C,ELEC 16V 10UF	1 1
C3627	430A8109	C,ELEC 16V 10UF	
C3628 C3629 C3630 C3631 C3632	42978147 42978147 430A8128 430A8110 42978148	C.FILM 100V 0.047UF C.FILM 100V 0.047UF C.ELEC 50V 1UF C.ELEC 16V 22UF C.FILM 100V 0.1UF	1 1 1 1
C3633 C3634 C3635 C3636 C3637	42978148 439J3060 430A8112 430A8109 430A8109	C,FILM 100V 0.1UF C,ELEC 50V 1.0UF C,ELEC 16V 47UF C,ELEC 16V 10UF C,ELEC 16V 10UF	1 1 1 1
C3639	430A8110	C,ELEC 16V 22UF	1 1
C3640	439J3014	C,ELEC 10V 47UF	
C3641	433A4161	C,ELEC 50V 1.0UF-5BSRA,AT	
C3642	433A4161	C,ELEC 50V 1.0UF-5BSRA,AT	
C3643	439J3060	C,ELEC 50V 1.0UF	
C3644	439J3060	C,ELEC 50V 1.0UF	1 1 1
C3645	421CB209	C,CERAMIC 50V 4.7 PF	
C3646	430A8112	C,ELEC 16V 47UF	
C3647	439J3025	C,ELEC 16V 22UF	
C3648	430A8110	C,ELEC 16V 22UF	
C3651	429G8265	C,METAL FILM 50V 0.015UF	1 1 1
C3652	429G8265	C,METAL FILM 50V 0.015UF	
C3653	439J3061	C,ELEC 50V 2.2UF	
C3654	430A8129	C,ELEC 50V 2.2UF	
C3655	421CB209	C,CERAMIC 50V 4.7 PF	

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		
1C5001 1C5002 1C5003 1C5004 1C5005	37101159 37101159 37151413 37151414 37101333	LA7016 ANALOG SW LA7016 ANALOG SW IC M51272FP IC M51279SP IC HA19508	1 1
1C5006 1C5007 1C5008 1C5009 1C5010	37101333 37101317 37101318 37151505 37101332	IC HA19508 IC MB 40778 IC MN 3106 IC HA11544 IC HA19216	1 1 1 1 1
1C5011 1C5012 1C5013 1C5014 1C5015	37151506 37151508 37101362 37101362 37101362	1C CXD1175 P/M DIP MOS SLA8FOSF-OC IC UPD41464V-12 IC UPD41464V-12 IC UPD41464V-12	1 1 1
1C5016 1C5017 1C5018 1C5019 1C5020	37101362 37101362 37101362 37101362 37101362	IC UPD41464V-12 IC UPD41464V-12 IC UPD41464V-12 IC UPD41464V-12 IC UPD41464V-12	1 1 1
1C5021 1C5022 1C5023 1C5024 1C5025	37101362 37101362 37101323 37101397 37151414	IC UPD41464V-12 IC UPD41464V-12 IC BA15218 (OP AMP) LVA-516(SYNC.SEP) IC M51279SP	1 1 1 1
1 C5026 1 C5027 1 C5028 1 C5029 1 C5201	37101397 37101159 37101159 37951156 37951185	LVA-516(SYNC.SEP) LA7016 ANALOG SW LA7016 ANALOG SW IC MOS UPD74HC00C IC MOS UPD 74HC02C	1 1 1
*** TRA	NSISTORS *:	**	
Q5001 Q5007 Q5008 Q5009 Q5010	356K0618 356D0618 356D0618 356K0618 356D0618	2SA1037K-R,AT 2SC2412K-R(0°) 2SC2412K-R(0°) 2SA1037K-R,AT 2SC2412K-R(0°)	1 1 1 1
Q5011	356D0618	2SC2412K-R(0°)	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
Q5013 Q5014 Q5015 Q5016	356K0618 356K0618 356D0618 356K0618	2SA1037K-R,AT 2SA1037K-R,AT 2SC2412K-R(0°) 2SA1037K-R,AT	1 1 1
Q5017 Q5018 Q5019 Q5020 Q5021	356K0618 356D0618 356K0618 356K0618 35502111	2SA1037K-R,AT 2SC2412K-R(0°) 2SA1037K-R,AT 2SA1037K-R,AT TR,BN1L4M(A,47K)	· ·
Q5022 Q5024 Q5025 Q5026 Q5030	35542717 355D2717 355K2106 355K2105 355D2710	TR.BAIL4M(C.47K) TR.BAIL4M TR.DTA124ES.AT DTA144ES.AT DTC124ES.AT	1 1 1 1
Q5201 Q5202 Q5203 Q5204 Q5205	356D0618 356K0618 356K0618 356D0618 356K0618	2SC2412K-R(0°) 2SA1037K-R,AT 2SA1037K-R,AT 2SC2412K-R(0°) 2SA1037K-R,AT	1 1 1 1
Q5206 Q5501 Q5502 Q5511 Q5512	356K0618 355K2111 355D2717 355K1131 355K1131	2SA1037K-R,AT TR,BN1L4M(A,47K)AT TR,BA1L4M TR,2SA1175 (E,F,H,J) TR,2SA1175 (E,F,H,J)	1 1 1 1
Q5513	355D1931	TR.2SC2785(E.F.H.J)AT	1
*** DIC	DES ***		
D5002 D5003 D5004 D5010 D5012	360KC979 360KC979 360KC979 36001025 360KA025	DIODE DAN202K-N,T2,AT DIODE DAN202K-N,T2,AT DIODE DAN202K-N,T2,AT DIODE 1SS133 DIODE 1SS133	1 1 1 1 1
D5013 D5501 ZD5001	360KA025 360KA025 369KE161	DIODE 1SS133 DIODE 1SS133 ZENER DIODE RD5.1EB2,AT26	1 1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY			
*** VAR	*** VARIABLE RESISTORS ***					
VR5001 VR5003 VR5004 VR5005 VR5007	41951257 41951257 41951257 41951257 41951254	R,VARIABLE 47KB R,VARIABLE 47KB R,VARIABLE 47KB R,VARIABLE 47KB R,VARIABLE 10KB	1 1 1 1			
VR5008 VR5009 VR5010 VR5011	41951254 41951261 41951254 41951254	R,VARIABLE 10KB R,VARIABLE 220KB R,VARIABLE 10KB R,VARIABLE 10KB	1 1 1 1			
*** COI	LS & FILTERS	***				
LF5001 L5001 L5002 L5003 L5007	61827081 610G1623 610G1623 610G1623 610G1623	LOW PASS FILTER FILTER COIL 33UH AT (S)	1 1 1 1			
L5008 L5009 L5010 L5011 L5012	610G1625 610G1629 610G1623 610G1522 610G1522	FILTER COIL 47UH AT (S) FILTER COIL 100UH AT (S) FILTER COIL 33UH AT (S) FILTER COIL 27UH AT (S) FILTER COIL 27UH AT (S)	1 1			
L5013 L5014 L5015 L5016 L5017	610G1518 610G1517 610G1623 610G1623 610G1623	FILTER COIL 12UH AT(S) FILTER COIL 10UH AT (S) FILTER COIL 33UH AT (S) FILTER COIL 33UH AT (S) FILTER COIL 33UH AT (S)	1 1 1 1			
L5020 L5021 L5022 L5023 L5025	610G1623 610G1623 610G1623 610G1517 610G1623	FILTER COIL 33UH AT (S) FILTER COIL 33UH AT (S) FILTER COIL 33UH AT (S) FILTER COIL 10UH AT (S) FILTER COIL 33UH AT (S)	1 1 1			
L5026 L5027 L5028 L5029 L5201	610G1511 610G1517 610G1523 610G1523 610G1623	FILTER COIL 3.3UH AT (S) FILTER COIL 10UH AT (S) FILTER COIL 33UH AT(S) FILTER COIL 33UH AT(S) FILTER COIL 33UH AT (S)	1 1 1 1			

MODEL	:	DIGITAL	PWB	ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** PWE	B ASSYS ***		
	81B26N01 81B26Y01	SUB DIGITAL-2 PWB ASSY SUB DIGITAL-1 PWB ASSY	1
*** ELE	CTRICAL PARTS	S & MISCELLANE OUS PARTS	***
X5001 X5002 X5201 X5202	64004164 64004164 64004174 64004175	CRYSTAL (17.734MHZ) CRYSTAL (17.734MHZ) X'TAL 11.727MHZ X'TAL 11.746MHZ	1 1 1
*** APF	PEARANCE PARTS	***	
	16286932 16875531	CABLE TIE T18R(WHITE) SCREW M3*8*15BF	1 4
*** RES	SISTORS ***		
C5111 C5113 C5203 C5206 R5001	404X8801 404X8801 404X8801 404X8801 404X8677	R,CHIP METAL 000H JOUMPER R,CHIP METAL 000H JOUMPER R,CHIP METAL 000H JOUMPER R,CHIP METAL 000H JOUMPER R CHIP METAL 1.5K 5%1/16W	1
R5002 R5004 R5005 R5006 R5007	404X8731 404X8675 404X8673 404X8719 404X8681	R CHIP METAL 270K 5%1/16W R CHIP METAL 1.2K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 82K 5%1/16W R CHIP METAL 2.2K 5%1/16W	1 1 1 1
R5008 R5009 R5010 R5011 R5012	404X8711 404X8673 404X8673 404X8673 404X8673	R CHIP METAL 39K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1
R5013 R5014 R5015 R5016 R5017	404X8683 404X8701 404X8701 404X8743 404X8709	R CHIP METAL 2.7K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 15K 5%1/16W R CHIP METAL 820K 5%1/16W R CHIP METAL 33K 5%1/16W	1 1 1 1
R5018 R5019 R5020 R5021	404X8737 404X8677 404X8643 404X8661	R CHIP METAL 470K 5%1/16W R CHIP METAL 1.5K 5%1/16W R CHIP METAL 56H 5%1/16W R CHIP METAL 330H 5%1/16W	1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5036	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5037	404X8673	R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1 1
R5038	404X8721	R CHIP METAL 100K 5%1/16W	
R5039	404X8673	R CHIP METAL 1.0H 5%1/16W	
R5040	404X8653	R CHIP METAL 150H 5%1/16W	
R5041	404X8685	R CHIP METAL 3.3K 5%1/16W	
R5042	404X8673	R CHIP METAL 1.0H 5%1/16W	1 1 1 1 1 1 1
R5043	404X8681	R CHIP METAL 2.2K 5%1/16W	
R5044	404X8673	R CHIP METAL 1.0H 5%1/16W	
R5045	404X8681	R CHIP METAL 2.2K 5%1/16W	
R5046	404X8687	R CHIP METAL 3.9K 5%1/16W	
R5047	404X8668	R CHIP METAL 620H 5%1/16W	1 1 1 1 1 1
R5048	404X8687	R CHIP METAL 3.9K 5%1/16W	
R5049	404X8669	R CHIP METAL 680H 5%1/16W	
R5052	409HB662	R,CARBON 360H 5% 1/4W	
R5053	404X8659	R CHIP METAL 270H 5%1/16W	
R5054 R5055 R5056 R5057 R5058	404X8689 404X8697 404X8697 404X8689 404X8633	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 22H 5%1/16W	1 1 1 1 1 1 1
R5059 R5060 R5062 R5063 R5064	404X8689 404X8633 404X8705 404X8713 404X8709	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 22H 5%1/16W R CHIP METAL 22K 5%1/16W R CHIP METAL 47K 5%1/16W R CHIP METAL 33K 5%1/16W	1 1 1 1 1
R5065	404X8681	R CHIP METAL 2.2K 5%1/16W	1 1 1 1 1 1
R5066	404X8725	R CHIP METAL 150K 5%1/16W	
R5067	404X8725	R CHIP METAL 150K 5%1/16W	
R5068	404X8703	R CHIP METAL 18K 5%1/16W	
R5069	404X8689	R CHIP METAL 4.7K 5%1/16W	
R5070	404X8689	R CHIP METAL 4.7K 5%1/16W	1
R5071	404X8663	R CHIP METAL 390H 5%1/16W	1
R5072	404X8801	R.CHIP METAL 000H JOUMPER	1
R5073	404X8801	R.CHIP METAL 000H JOUMPER	1
R5074	404X8801	R.CHIP METAL 000H JOUMPER	1
R5075	404X8673	R CHIP METAL 1.0H 5%1/16W	1
R5078	404X8657	R CHIP METAL 220H 5%1/16W	1
R5079	404X8673	R CHIP METAL 1.0H 5%1/16W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5080 R5081	404X8673 404X8666	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 510H 5%1/16W	1 1
R5082 R5083 R5084 R5085 R5086	404X8679 404X8689 404X8689 404X8689 404X8689	R CHIP METAL 1.8K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W	1 1 1 1
R5087 R5088 R5089 R5091 R5093	404X8689 404X8689 404X8689 404X8689 404X8689	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W	1 1 1 1
R5094 R5095 R5096 R5097 R5098	404X8689 404X8689 404X8685 404X8689 404X8721	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 3.3K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 100K 5%1/16W	1 1 1
R5099 R5100 R5101 R5102 R5103	404X8737 404X8667 404X8745 404X8695 404X8707	R CHIP METAL 470K 5%1/16W R CHIP METAL 560H 5%1/16W R CHIP METAL 1.0M 5%1/16W R CHIP METAL 8.2K 5%1/16W R CHIP METAL 27K 5%1/16W	1 1 1 1
R5104 R5105 R5106 R5107 R5108	404X8683 404X8689 404X8643 404X8661 404X8667	R CHIP METAL 2.7K 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 56H 5%1/16W R CHIP METAL 330H 5%1/16W R CHIP METAL 560H 5%1/16W	1 1 1 1
R5109 R5110 R5111 R5112 R5113	404X8745 404X8695 404X8707 404X8683 404X8673	R CHIP METAL 1.0M 5%1/16W R CHIP METAL 8.2K 5%1/16W R CHIP METAL 27K 5%1/16W R CHIP METAL 2.7K 5%1/16W R CHIP METAL 1.0H 5%1/16W	1 1 1 1
R5114 R5115 R5116 R5117 R5118	404X8705 404X8737 404X8695 404X8691 404X8710	R CHIP METAL 22K 5%1/16W R CHIP METAL 470K 5%1/16W R CHIP METAL 8.2K 5%1/16W R CHIP METAL 5.6K 5%1/16W R CHIP METAL 36K 5%1/16W	1 1 1 1
R5119 R5120	404X8689 404X8659	R CHIP METAL 4.7K 5%1/16W R CHIP METAL 270H 5%1/16W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
R5121 R5123 R5124	404X8705 404X8665 404X8649	R CHIP METAL 22K 5%1/16W R CHIP METAL 470H 5%1/16W R CHIP METAL 100H 5%1/16W	1 1
R5125 R5126 R5127 R5128 R5129	404X8649 404X8801 404X8649 404X8689 404X8708	R CHIP METAL 100H 5%1/16W R,CHIP METAL 000H JOUMPER R CHIP METAL 100H 5%1/16W R CHIP METAL 4.7K 5%1/16W R CHIP METAL 30K 5%1/16W	1 1 1 1
R5130 R5132 R5133 R5134 R5135	404X8704 404X8713 404X8673 404X8713 404X8801	R CHIP METAL 20K 5%1/16W R CHIP METAL 47K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 47K 5%1/16W R,CHIP METAL 400H JOUMPER	1 1 1 1
R5202 R5203 R5204 R5205 R5206	404X8729 404X8721 404X8673 404X8729 404X8721	R CHIP METAL 220K 5%1/16W R CHIP METAL 100K 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 220K 5%1/16W R CHIP METAL 100K 5%1/16W	1 1 1 1
R5207 R5210 R5211 R5212 R5215	404X8673 404X8673 404X8697 404X8697 404X8655	R CHIP METAL 1.0H 5%1/16W R CHIP METAL 1.0H 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 10K 5%1/16W R CHIP METAL 180H 5%1/16W	1 1 1 1
R5302 R5303 R5304 R5305 R5306	401KE691 401KE673 401KE727 401KE727 401KE697	R,CARBON 5.6K 5% 1/6W R,CARBON 1.0K 5% 1/6W R,CARBON 180K 5% 1/6W R,CARBON 180K 5% 1/6W R,CARBON 10K 5% 1/6W	1 1 1 1
R5307 R5501 R5502 R5503 R5504	401KE721 401KE689 401KE689 401KE689 401KE689	R,CARBON 100K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 4.7K 5% 1/6W R,CARBON 4.7K 5% 1/6W	1 1 1 1
R5511 R5512	401KE697 401KE697	R.CARBON 10K 5% 1/6W R.CARBON 10K 5% 1/6W	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** CAF	PACITORS ***		
C5001	430A8112	C,ELEC 16V 47UF	1 1
C5002	423X9705	CC CHIP12 JF50V0.022UF80%	
C5003	430A8112	C,ELEC 16V 47UF	
C5004	423X9705	CC CHIP12 JF50V0.022UF80%	
C5005	433A4126	C,ELEC 6.3V 22UF-5BSRA,AT	
C5006	430A8101	C,ELEC 6.3V 22UF	1 1 1
C5007	423X9705	CC CHIP12 JF50V0.022UF80%	
C5008	423X9705	CC CHIP12 JF50V0.022UF80%	
C5009	423X9705	CC CHIP12 JF50V0.022UF80%	
C5010	430A8127	C,ELEC 50V 0.47UF	
C5011	430A8128	C,ELEC 50V 1UF	1 1 1 1
C5012	430A8128	C,ELEC 50V 1UF	
C5013	430A8127	C,ELEC 50V 0.47UF	
C5014	423X9705	CC CHIP12 JF50V0.022UF80%	
C5018	423X2649	CC CHIP12 N00050V 100PF5%	
C5019	423X9705	CC CHIP12 JF50V0.022UF80%	1 1 1 1 1
C5021	430A8103	C.ELEC 6.3V 47UF	
C5023	423X1655	CC CHIP12 50V 180PF5%	
C5024	430A8128	C.ELEC 50V 1UF	
C5025	430A8128	C.ELEC 50V 1UF	
C5026	430A8127	C,ELEC 50V 0.47UF	1 1 1 1 1
C5027	430A8112	C,ELEC 16V 47UF	
C5028	429C0333	C,CERAMIC 25V 0.047UF	
C5029	429G6501	C,FILM 50V 1000PF 5%	
C5030	423X1627	CC CHIP12 50V 12PF5%	
C5031	423X1627	CC CHIP12 50V 12PF5%	1 1 1 1
C5032	423X1649	CC CHIP12 50V 100PF5%	
C5033	423X1649	CC CHIP12 50V 100PF5%	
C5034	423X1653	CC CHIP12 50V 150PF5%	
C5035	429G6502	C,FILM 50V 1200PF 5%	
C5036	423X9705	CC CHIP12 JF50V0.022UF80%	1 1 1 1 1
C5037	430A8128	C.ELEC 50V 1UF	
C5038	430A8103	C.ELEC 6.3V 47UF	
C5039	423X9705	CC CHIP12 JF50V0.022UF80%	
C5040	430A8130	C.ELEC 50V 3.3UF	
C5041	429G6519	C.FILM 50V 0.033UF 5%	1 1
C5042	423X1649	CC CHIP12 50V 100PF5%	
C5043	423X2625	CC CHIP12 N00050V 10PF 5%	

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5044	423X9705	CC CHIP12 JF50V0.022UF80%	1
C5045	423X9705	CC CHIP12 JF50V0.022UF80%	
C5049	423X1673	CC CHIP12 50V1000PF5%	1 1 1 1 1
C5050	423X1673	CC CHIP12 50V1000PF5%	
C5056	430A8112	C.ELEC 16V 47UF	
C5057	423X9705	CC CHIP12 JF50V0.022UF80%	
C5058	430B9026	C.ELEC 16V 22UF	
C5059	430B9029	C,ELEC 16V 100UF	1 1 1
C5060	429C0333	C,CERAMIC 25V 0.047UF	
C5061	430B9026	C,ELEC 16V 22UF	
C5062	430B9026	C,ELEC 16V 22UF	
C5063	423X9705	CC CHIP12 JF50V0.022UF80%	
C5064	430B9003	C,ELEC 6.3V 100UF	1 1 1
C5065	430B9003	C,ELEC 6.3V 100UF	
C5066	423X9705	CC CHIP12 JF50V0.022UF80%	
C5067	423X9705	CC CHIP12 JF50V0.022UF80%	
C5068	430B9003	C,ELEC 6.3V 100UF	
C5069	429C0333	C,CERAMIC 25V 0.047UF	1 1 1
C5070	430A8104	C,ELEC 6.3V 100UF	
C5071	429C0333	C,CERAMIC 25V 0.047UF	
C5072	430A8101	C,ELEC 6.3V 22UF	
C5073	423X9705	CC CHIP12 JF50V0.022UF80%	
C5074	430A8104	C,ELEC 6.3V 100UF	1 1 1 1
C5075	429C0333	C,CERAMIC 25V 0.047UF	
C5076	423X9705	CC CHIP12 JF50V0.022UF80%	
C5077	423X9705	CC CHIP12 JF50V0.022UF80%	
C5078	430A8113	C,ELEC 16V 100UF	
C5079 C5080 C5081 C5082 C5083	423X1641 423X1649 429G6921 429G6909 429C0337	CC CHIP12 50V 47PF5% CC CHIP12 50V 100PF5% C.METAL FILM 50V 0.47UF C METAL FILM 50V 0.047UF C.CERAMIC 25V 0.1UF	1 1 1
C5084	429C0337	C,CERAMIC 25V 0.1UF	1 1 1 1
C5085	423X9705	CC CHIP12 JF50V0.022UF80%	
C5086	430B9003	C,ELEC 6.3V 100UF	
C5087	423X9705	CC CHIP12 JF50V0.022UF80%	
C5088	430B9003	C,ELEC 6.3V 100UF	
C5090	423X2647	CC CHIP12 N00050V 82PF 5%	1 1
C5092	430B9026	C.ELEC 16V 22UF	

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5093 C5094 C5095	429C0337 429C0337 430B9003	C,CERAMIC 25V 0.1UF C,CERAMIC 25V 0.1UF C,ELEC 6.3V 100UF	1 1 1
C5096 C5097 C5098 C5099 C5100	429C0333 430B9003 429C0333 43029032 429C0333	C,CERAMIC 25V 0.047UF C,ELEC 6.3V 100UF C,CERAMIC 25V 0.047UF C,ELEC,16V 470UF C,CERAMIC 25V 0.047UF	1 1 1 1
C5101 C5102 C5103 C5104 C5105	429C0333 430B9003 429C0333 423X1649 423X1649	C,CERAMIC 25V 0.047UF C,ELEC 6.3V 100UF C,CERAMIC 25V 0.047UF CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5%	1 1 1 1
C5106 C5107 C5108 C5109 C5110	423X1649 423X1649 423X1649 423X1649 423X1649	CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5%	1 1 1 1
C5112 C5114 C5115 C5116 C5117	423X1649 423X1649 423X8209 423X1649 423X1649	CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5% CC CHIP12 JB25V0.033UF20% CC CHIP12 50V 100PF5% CC CHIP12 50V 100PF5%	1 1 1 1 1 1
C5118 C5119 C5120 C5121 C5122	423X1649 430B9003 429C0333 429C0333 429C0333	CC CHIP12 50V 100PF5% C,ELEC 6.3V 100UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF	1 1 1 1
C5123 C5124 C5125 C5126 C5127	429C0333 429C0333 429C0333 429C0333 423X1667	C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF CC CHIP12 50V 560PF5%	1 1
C5128 C5129 C5130 C5131 C5132	429C0337 430A8128 423X9705 423X9685 423X2667	C,CERAMIC 25V 0.1UF C,ELEC 50V 1UF CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V3300PF 80% CC CHIP12 N00050V 560PF5%	1 1 1
C5133	430A8111	C.ELEC 16V 33UF	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5136 C5137 C5138 C5139	423X1649 423X2625 423X1667 429G8255	CC CHIP12 50V 100PF5% CC CHIP12 N00050V 10PF 5% CC CHIP12 50V 560PF5% C.METAL FILM 50V 2200PF	1 1 1
C5140 C5141 C5142 C5143 C5144	430A8128 423X9705 423X9685 423X2667 430A8111	C.ELEC 50V 1UF CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V3300PF 80% CC CHIP12 N00050V 560PF5% C.ELEC 16V 33UF	1 1 1 1
C5145 C5146 C5147 C5148 C5149	429C0337 429C0337 429C0337 430A8103 429C0337	C,CERAMIC 25V 0.1UF C,CERAMIC 25V 0.1UF C,CERAMIC 25V 0.1UF C,ELEC 6.3V 47UF C,CERAMIC 25V 0.1UF	1 1 1
C5151 C5152 C5153 C5154 C5155	429C0333 423X9705 423X9705 423X9705 423X9705	C,CERAMIC 25V 0.047UF CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80%	1 1 1
C5156 C5157 C5158 C5159 C5160	423X9705 423X9705 423X9705 430A8112 423X9705	CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80% CC CHIP12 JF50V0.022UF80% C.ELEC 16V 47UF CC CHIP12 JF50V0.022UF80%	1 1 1 1
C5161 C5162 C5163 C5164 C5201	430A8112 423X9705 430B9003 429C0333 429C0333	C,ELEC 16V 47UF CC CHIP12 JF50V0.022UF80% C,ELEC 6.3V 100UF C,CERAMIC 25V 0.047UF C,CERAMIC 25V 0.047UF	1 1 1 1
C5202 C5204 C5205 C5207 C5208	430A8112 423X1645 423X1633 423X1645 423X1633	C,ELEC 16V 47UF CC CHIP12 50V 68PF5% CC CHIP12 50V 22PF5% CC CHIP12 50V 68PF5% CC CHIP12 50V 22PF5%	1 1 1 1 1
C5210 C5211 C5302 C5306 C5307	423X1643 423X8921 430A8103 421CB029 421CB029	CC CHIP12 50V 56PF5% C.CERAMIC 50V 0.1UF C.ELEC 6.3V 47UF C.CERAMIC 50V 47 PF C.CERAMIC 50V 47 PF	1 1 1 1
C5308	423A2102	C,CERAMIC 50V 150PF	1

MODEL : DIGITAL PWB ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
C5309 C5310 C5312 C5501	421CB037 429G6517 421CB042 423A1057	C,CERAMIC 50V 100PF C,FILM 50V 0.022UF 5% C,CERAMIC 50V 270PF C,CERAMIC 50V 330PF	1 1 1
C5511	430A8124	C.ELEC 50V 0.1UF	1

MODEL : EVER5V TR MK-2 ASSY

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ICS	***		
	37101375	IC UPC7805HAA(SELECT)	1

MODEL	:	POWER	/REG	UNIT
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MODEL: JACK TERMINAL	PWB ASSY		
ZYMBOL	PARTS NO	DESCRIPTION	QTY
MD0901 Q1 D1 R10 R6 R7 R9 C1 C11 C12 C13 C14 C2 C3 C11 L1 RL1 FL1 FL2 FL3 FL4 FL5 FL6	34354029 35542709 360KA025 401KE646 401KE646 401KE646 42311100 42311100 42311100 42311100 42311100 42311100 430A8112 610G1829 65910086 69699005 69699005 69699005 69699005 69699005	RF.MODULATOR B/G,36) AL3 Micro relay G5A-237P(12V) DIODE 1SS133, AT26 RD1/6PTY75HJ, AT26 RD1/6PTY75HJ, AT26 RD1/6PTY75HJ, AT26 RD1/6PTY75HJ, AT26 CC45SL1H391J,B CSB2T1 RILTER COIL 0405-5 101K,AT DIGITAL TRANSISTOR DTC114ES DS310-55B271 DS310-55B271 DS310-55B271 DS310-55B271 DS310-55B271 DS310-55B271 DS310-55B271	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

SYMBOL	PARTS NO	DESCRIPTION	QTY
	18292501	WIRE CLAMPER NIFUKO 2104	1
TR008	350D7217	TR 2SC945-T Q	1
TR006	35170501	ZENER DIODE AA1A4M	1
TR003	35541931	2SC2785 (E, F, H, J)	1
TR004	35924117	TRANSISTOR 2SB941Q	1
D001	369KB107	DIODE 11E2A1 (AT26)	1 [
D002	369KB107	DIODE 11E2TA1 (AT26)	1
ZD003	369KE161	ZENER DIODE RD5. 1EB2, AT26	1
R020	409H2715	RD1/4PTY56KJ, AT (83)	1
R019	409H2737	RD1/4PTY47KJ, AT (94)	1
R014	40913173	RD1/4PTB1.0KJ,F	1
R103	40913177	RD1/4PTB1.5KJ, F	1
R017	40932070	RS1PB150HJ, D	1
R008	40952875	RN1/4LTB1.1KF, A	1
R015	40952885	RN1/4LTB3.3KF, A	1
R016	40952885	RN1/4LTB3.3KF, A	1
R009	40952887	RN1/4LTB3.9KF, A	1
R008	40952909	RN1/4LTB33KF, A	1
C011	42311045	CC45SL1H101J, B	1
C091	42980100	CFS93MPAC2E683MAUCE	1
C006	430A8028	CE04C1H2R2-3.5BSRA, AT	1
C004	430B6028	CE04W1C470M-BTS	1
C009	430B6028	CE04W1C470M-BTS	1
C012	430B6028	CE04W1C470M-BTS	1
C007	439A1026	CE04C1E470BS, AT (NXD)	1
L091	61062018	COIL, LINE FILTER	1
F001	66671005	FUSE MF51T250V2A-CB	1
F091	66671005	FUSE MF51T250V2A-CB	1
C005	43026048	CED4W1E332MAS	i 1
C008	43026048	CED4W1E332MAS	1
PC001	70804204	POWER CORD ASSY FTZ	1
IC002	79VA0003	IC M5237L UCZ0097ZZ	1
R012	79VA0013	1W0.47HK, S UEFDR47BE	1
R007	79VA0016	1/4W220HJ, B (7.5) UEEB221BA	1
R007	79VA0023	CE04W2A101MA UGAJ101BU	1
C001	79VA0079	CE04W1C 472MA	1
TR005	79VA0080	TR AN1F4M	1
D003	79VA0083	DIODE 11E1	1
D004	79VA0083	DIODE 11E1	1
D005	79VA0083	DIODE 11E1	1
D006	79VA0083	DIODE 11E1	1
D007	79VA0083	DIODE 11E1	1
D008	79VA0083	DIODE 11E1	1
D009	79VA0083	DIODE 11E1	1
D010	79VA0083	DIODE 11E1	1
D011	79VA0083	DIODE 11E1	1
D012	79VA0083	DIODE 11E1	1
D013	79VA0083	DIODE 11E1	- i
D014	79VA0083	DIODE 11E1	1
D015	79VA0083	DIODE 11E1	1
D016	79VA0083	DIODE 11E1	1
D017	79VA0083	DIODE 11E1	1
D018	79VA0083	DIODE 11E1	1
C010	79VA0094	CE04W1E471VB	1
C010	79VA0094	CE04W1E471VB	1
TR002	79VA0099	TRANSISTOR 2SD1985	1
IC001	79VA0100	IC PQ05R041	1
TR007	79VA0137	TRANSISTOR 2SD1565	1

SYMBOL	PARTS NO	DESCRIPTION	QTY
DS001	79VA0138	DIODE D3SBA40	1
C002	79VA0140	CE04W1J221MAS	1
PT00	79VA0147	TRANSFORMER 816035043	1
C015	79VA0148	CE04C1E221MA (105°)	1
R003	79VA0149	RD1/4PTYR27J	1
R004	79VA0149	RD1/4PTYR27J	1
R005	79VA0150	RD1/4PTYR30J	1
R006	79VA0150	RD1/4PTYR30J	1
R018	79VA0151	RC1LTB56HJ	1

MODEL: OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** PWE	ASSYS ***		
	81A80Z01 81B26C01 81B26N01 81B26W01 81B26Y01	DRUM J. S.A(FE-S-4H-HF) CHROMA CTRL PWB ASSY SUB DIGITAL-2 PWB ASSY SUB VIDEO PWB ASSY SUB DIGITAL-1 PWB ASSY	1 1 1 1
PA02 PA04 PA05 PA06	81B26Z01 81B26B01 81B26D01 81B26E01 81B26F01	SUB VIDEO 2 PWB ASSY VIDEO PWB ASSY SYSCON/SERVO PWB ASSY TUNER/IF PWB ASSY TIMER/FUNC PWB ASSY	1 1 1
PA07 PA08 PA11 PA12 PA17 PA18 PA19 PA24	81B26G01 81B26H01 81B26K01 81B26L01 81A95Q01 795B26R2 81A80S01 81B26X01	DIGITAL PWB ASSY AUDIO PWB ASSY SUB FUNCTION PWB ASSY PRE AMP PWB ASSY DECODER PWB ASSY POWER/REG UNIT ASSY FLYING ERASE PWB ASSY H.P/VIDEO SW PWB ASSY	1 1 1 1 1 1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
*** ELE	CTRICAL PARTS	& MISCELLANE OUS PARTS	***
	70780001 71128537 795B26R2 79559054 79799653	CABLE, CONNECTOR (150MM) JACK TERMINAL DS6000G POWER/REG UNIT DS6000G IEC RF CABLE (1.2M) REMOTE CONT.UNIT TRB-60G	1 1 1 1
BZ1771 B056 FD2001 JK2001 JK2002 A110 RM1101 RM1102 RM1103 U2001 X1101	63099017 79762072 67930096 70905730 70905764 71128539 39906128 39901055 39906131 79539009 39080023	PIEZO BUZZER KBS-20B-6P MINIATURE MAGNET (MP-5) FIP16QM6 (DX4000G) HEAD PHONE JACK 1406 (2) RCA 3P JACK (GOLD) JACK TERN NAL PWB ASSY RBLOCK100K*5 1.8MM 1/16W R BLOCK1.0K*6 1.8MM 1/16W RBLOCK100K*8 1.8MM 1/16W IR RECIEVER SBX-1483-55 4.19MHZ RESONATOR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
X1401 X1402 X1602 X2001 X2002	64004143 64004173 39080031 39080023 64004151	X'TAL 4.43MHZ (W/O-ADJ) X'TAL 13.3MHZ (3FSC-PAL) CERAMIC RESONATOR 3.34MHZ 4.19MHZ RESONATOR X'TAL 32.768KHZ	1
X2003 X3001 X5001 X5002 X5201	64004139 39080012 64004164 64004164 64004174	50HZ OSCILLATOR LQT-50X-1 CERAMIC RESO. CSB500E5 CRYSTAL (17.734MHZ) CRYSTAL (17.734MHZ) X'TAL 11.727MHZ	1 1 1 1
X5202	64004175	X'TAL 11.746MHZ	1
*** APP	EARANCE PARTS	***	
	16178693 16189374 16189981 16189991 16286932	SAPORT BRACKET BOTTOM CHASSIS ASSY FOOT ASSY FRONT(R) FOOT ASSY FRONT(L) CABLE TIE TIBR(WHITE)	1 1 1 1 10
	16289031 16450671 16533142 16875531 16876141	SUPPORT S CORD BAND(VK-2) ROTOR BUSH SCREW M3*8*15BF SCREW 2CPTS3*12*15BF	2 1 1 4 9

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY		
A006 A001 A008 A002 A003 A101 A102 A103 B522 A108 B080 B532 B533 B533 B533 B533	16877101 16877501 16878181 16878211 18878211 188E6191 16481471 188E6211 19516371 82B26AH1 82788NF1 16189872 16189871 16191571 16586161 16186144 16454681 16573831 166773831 16878381 16631221 1658791 16876431 16876431 16876431 16876431	SCREW CPIMS*2.6*6*15BF S-CBBMS*3*8*3GF SCREW,STB 3*8 (RED) SPECIAL SCREW 3*8*15CF A SCREW SPECIAL 3*8 SLIDE KNOB B SCREW SPECIAL WIRE CLAMPER-B ROTARY DRUM S,A EVER5V TR MK-2 ASSY FRONT PANEL ASSY DS6000G DOOR ASSY TOP COVER ASSY DS6000G BOTTOM PLATE CASSETTE HOUSE ASSY CASSETTE HOUSE ASSY CASSETTE HOUSE ASSY CASSETTE DOOR DS6000G FRONT COVER SPRING SCREW PTP2.6*6*15BF FUSE COVER(3) M SWITCH STICK PLATE SCREW PTB 4*12*15BF SCREW PTB 4*12*15BF SCREW SCREW S M2*8*15BF SPECIAL SCREW	222942121111111166419		
*** PRI	NTED & PACKIN	NG MATERIALS ***	,		
	16825382 16834821 78820481 79759164 79759236	POLYETHYLENE BAG 260*380 ACCESSORY BOX(88) INSTRUCTION BOOK DS6000G PIN PLUG CORD (SILVER) S CABLE (CHROME)	1 1 1 1 1		
K009 K010 K011 K011 K012	16835811 16834171 16830121 16831761 16836311	CUSHION(F) CUSHION(REAR) PACKAGE SHEET CARTON BOX DS6000G	1 1 1 1 1		
*** MECHANICAL PARTS ***					
B001 B002	16286932 16452011 16185786 16185812	CABLE TIE TIBR(WHITE) COLLAR (1ST) TEN.REG.ARM ASSY BAND BRAKE ASSY	1 1 1		

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION	QTY
L	<u> </u>		1				1
B003	16185874	S SOFT BRAKE ASSY	1	B044 B045	16583431 16626541	REVERSE ARM SPLING WASHER(3)	1
B004 B005 B006 B007 B008	16185883 82756BF1 82756BG1 16185673 16185863	T SOFT BRAKE ASSY LOADING ARM (T)SASSY LOADING ARM (S)SASSY C BRAKE ASSY REV BRAKE ASSY		B046 B046 B047 B049 B050	16288001 16628731 16629412 16629382 16630591	POLY SLIDER SPACER SLIT WASHER SLIT WASHER SLIT WASHER SLIT WASHER	2 2 2 2 4
B009 B010 B011 B012 B012	16185731 16185721 16450291 16186222 16584341	T REEL PLATE ASSY S REEL PLATE ASSY BELT PULLEY (GB) EARTH PLATE ASS'Y EARTH PLATE	1 1 1 1 1 1	B052 B054 B055 B057 B058	16584851 19516371 79502078 82B26AA1 16185424	EARTH SPRING(HOLDER) WIRE CLAMPER-B CAPSTAN MOTER HEAD DRUM S.A(S-P-4HF-FE)	1 1 1 1 1
8013 B014 B015 B016 B017	16185773 16185763 16450351 16185902 16185793	T MAIN BRAKE ASSY S MAIN BRAKE ASSY ROADING CAM REVERSE ARM ASSY (FLUNGE) MODE ARM ASSY	1 1 1 1 1 1	8501 8059 8060 8061 8065 8066	91012361 16185433 16190362 16629401 16628791 16185853	S SLANT BASE ASSY SCREW, CPIMS2.6*10*15BF(S) T SLANT BASE ASSY A/C HEAD ASSY (AL) SLIT WASHER WASHER PINCH ROLLER FULL ASSY	3 1 1 1 1 1
B018 B019 B020 B021 B022	16287641 !6185612 !6185641 !6185752 !6450102	NUT RINK (M) ASSY ARM (TOP) ASSY CR REVER ASSY ROADING GEAR (S)	3 1 1 1	8502 8068 8069 8070 8071	910E3031 16288721 16185975 82756PB1 16188741 79501159	SCREW,PL-CPIMS*3*6*15BF(S POLYSLIDER 2.1*7*0.5 MAIN CAM ASSY FE ARM SASSY IP ROLLER ASSY FE HEAD	1 1 1
B023 B024 B025 B026 B027	16450092 16456621 16185951 16450141 16189471	ROADING GEAR (T) RUBBER BELT V SECTOR GEAR ASSY CR SLIDER SOL LEVER ASSY	1 1 1 1 1	B072 B079 B073 B075 B076 B077	16586131 16186441 16185443 16185662 16583352	MM BASE LED HOLDER ASSY(LEA-3) ROADING ARM (S) ASSY ROADING ARM (T) ASSY ROADING SPRING	1 1 1
B028 B029 B030 B031 B032	16444374 16535821 16534231 16534251 16538151	G.P CAP IP COLLAR FRANGE COLLER TAPER PIN A	1 1 2 1 1	B082 B085 B083 B084 B086 B089 B090	16536691 82A99KB1 16450451 16185484 82756KY1 16583453 16584362	IP FLANGE(2) MINI MAG SASSY FE ARM SUB CHASSIS FULL ASSY M.SWITCH SASSY IP SPLING C MOTOR CATCH PLATE	
B033 B034 B035 B036 B037 B038 B040 B041 B043	16585591 16583491 16583333 16584521 16583341 91490301 16631331 16585251 16584891	TEN REG. SPRING(S) JOINT SPLING A/C SPRING CR TORSION SPLING GUIDE PIN SPLING SIWA*3*15BF SLIT WASHER 4.1*8*0.5 C BRK SPRING N IP FRANGE SPRING	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B090 B521 B094 B099 B104 B106 B107 B105 B108	91112001 16187173 16536121 16188252 82A21PC1 73200033 16585361 82A21PJ1 38200240	SCREW CBIMS 2*3*15BF HL LINK FULL ASSY ACE ADJUST BUSH (M3) S SW ASSY S SW SASSY CONNECTER TBG-PO8X-A1 SW PLATE(N) JUNCTION PWB SASSY (S) PHOTO INT.RUPT GP2SO9 B,C	2 1 1 1 1 1 1 1 1 1 1

MODEL : OTHER SERVICE PARTS

SYMBOL	PARTS NO	DESCRIPTION	QTY
B511 B516 B517 B528 B518 B519 B520 B527 B540	16878771 16878391 16876781 91012031 16878461 16876371 16876321 16878771 16877731	SCREW M3*8*3KF (P8) SCREW WS M3*12*15BF 5.5 SCREW,WS M2.6*6*15BF SCREW,CPIMS*2*6*115BF SCREW M3*8*15BF 6 SCREW PTB 3*8*15BF SCREW, S M3X4X15BF SCREW, S M3X4X15BF SCREW M3*8*3KF (P8) SPCIAL SCREW	435153511

MODEL: CASSETTE HOUSING ASSY

A301	SYMBOL	PARTS NO	DESCRIPTION
65907089 REC SAFETY SW	A302 A303 A304 A305	35290301 65330045 79502029 67012026	PHOTO TR PT361 TACT SWITCH DC MICRO MOTOR RF-280R- 10350 CASSETTE HOUSE LAMP

REPLACEMENT PARTS LIST

- Lists up the parts exclusively used in the Model DS6000G(2).
- Please refer to the Service Manual of DS6000G for the other parts.

MODEL: DS6000G(2) PARTS LIST

MODEL: DS6000G(2) PARTS LIST

SYMBOL	PARTS NO	DESCRIPTION	QTY	SYMBOL	PARTS NO	DESCRIPTION	Q1
· · · · · · · · · · · · · · · · · · ·	82A30NF1	EVER 5V TR ASSY (105°C)	1	C056	423X9697	CC CHIP12 JF1H 103Z.XV	1
8088	82B95AH1	ROTARY DRUM S.A (S-P-4HF-FE)	1	C057	423X9228	CC CHIP JF1E 224Z,XV	1
B057	82B95AA1	HEAD DRUM S.A (S-P-4HF-FE)	li l	C058	430A8325	CE04C1E3R3-5BSRE, AT	1
B058	16192111	S SLANT BASE ASSY (GB)	li l	C059	430A8318	CE04C1C100-5BSRE, AT	1
C001	423X9705	CC CHIP12 JF1H 223Z.XV	li l	C060	423X9705	CC CHIP12 JF1H 223Z.XV	1
2002	430A8318	CE04C1C100-5BSRE, AT	li l	C061	423X9221	CC CHIP12 JF1E 104Z,XV	1
0004	430A8311	CE04C1A220-5BSRE, AT	li l	C062	430A8325	CE04C1E3R3-5BSRE, AT	1
C005	430A8307	CE04C0J101-5BSRE, AT	i	C063	423X9705	CC CHIP12 JF1H 223Z.XV	1
0006	430A8307	CE04C0J101-5BSRE, AT	11 1	C064	430A8325	CE04C1E3R3-5BSRE, AT	l i
0007	430A8318	CE04C1C100-5BSRE, AT		C065	423X9697	CC CHIP12 JF1H 103Z.XV	1 1
0008	423X9697			C066	423X9097 423X9228	CC CHIP JF1E 224Z,XV	1 1
		CC CHIP12 JF1H 103Z.XV	11 1				14
0009	423X9697	CC CHIP12 JF1H 103Z.XV	1 1	C067	430A8325	CE04C1E3R3-5BSRE, AT	14
010	423X9705	CC CHIP12 JF1H 223Z.XV	1	C068	423X9697	CC CHIP12 JF1H 103Z.XV	1 :
011	423X9705	CC CHIP12 JF1H 223Z.XV	1 1	C069	423X9705	CC CHIP12 JF1H 223Z.XV	
012	423X9697	CC CHIP12 JF1H 103Z.XV	1	C070	430A8318	CE04C1C100-5BSRE, AT	1 !
013	423X9705	CC CHIP12 JF1H 223Z.XV	1	C071	430A8325	CE04C1E3R3-5BSRE, AT	1
014	423X9697	CC CHIP12 JF1H 103Z.XV	1	C072	423X9705	CC CHIP12 JF1H 223Z.XV	1
015	423X9705	CC CHIP12 JF1H 223Z,XV	1 1	C073	430A8318	CE04C1C100-5BSRE, AT	1
016	423X9697	CC CHIP12 JF1H 103Z.XV	1 1	C074	423X9705	CC CHIP12 JF1H 223Z.XV	1
017	423X2629	CC CHIP12 CH1H 150 J.XV	- 1 i - 1	C075	423X2641	CC CHIP12 CH1H 470 J,XV	1
018	423X9697	CC CHIP12 JF1H 103Z.XV		C076	423X2633	CC CHIP12 CH1H 220 J,XV	1
019	423X2629	CC CHIP12 CH1H 150 J.XV	- 1 i - 1	C078	423X9221	CC CHIP12 JF1E 104Z,XV	1
020	423X9697				423X9697	CC CHIP12 JF1H 103Z.XV	- 1 i
		CC CHIP12 JF1H 103Z.XV		C080			- 1 ;
021	423X9705	CC CHIP12 JF1H 223Z.XV		C081	423X2629	CC CHIP12 CH1H 150 J,XV	
022	423X9705	CC CHIP12 JF1H 223Z.XV	1	C1301 .	404X8653	RM1/16SCHIP 150HJ,XV	
023	430A8318	CE04C1C100-5BSRE, AT	1	C1449	404X8801	RM1/16SCHIP 000H J,XV	- !
024	423X9705	CC CHIP12 JF1H 223Z.XV	1 1	C1473	423X2649	CC CHIP12 CH1H 101 J,XV]
025	423X9221	CC CHIP12 JF1E 104Z,XV	1	C1508	43018105	CE04C1A220-5BSRA	1
0026	423X9221	CC CHIP12 JF1E 104Z,XV	1 1	C1542	421CB037	CK05B 1H101J, AT26 (3.5)	1
027	423X9221	CC CHIP12 JF1E 104Z,XV	1 1	C1542	430A8109	CE04C1C100-5BSRA, AT	1
028	423X9697	CC CHIP12 JF1H 103Z.XV	1 1	C1543	421CB862	CK05F 1E1032, AT26 (3.5)	1
029	423X9697	CC CHIP12 JF1H 103Z.XV	li l	C1544	421CB862	CK05F 1E1032, AT26 (3.5)	1
030	423X2629	CC CHIP12 CH1H 150 J.XV	li l	C1545	421CB862	CK05F 1E1032, AT26 (3.5)	1
031	423X9697	CC CHIP12 JF1H 103Z.XV	li l	C1407	360KA025	DIODE 1SS133, AT26	1
032	423X9697		i	C1407	360KA025	DIODE 1SS133, AT26	1
033		CC CHIP12 JF1H 103Z.XV			360KA025	DIODE 188133, AT26	1 4
	423X9697	CC CHIP12 JF1H 103Z.XV	!!!	C1409			1
034	423X9697	CC CHIP12 JF1H 103Z.XV	1 1	FL001	61828040	350NS DELAY LINE (FC=6MHZ)	1
035	423X9705	CC CHIP12 JF1H 223Z.XV	1 1	FL002	61828039	4.43MHZ B.P.F. (COMB)	1 '
036	423X9221	CC CHIP12 JF1E 104Z,XV	1 1	FL003	61828039	4.43MHZ B.P.F. (COMB)	
037	430A8325	CE04C1E3R3-5BSRE, AT	1	FL004	61828039	4.43MHZ B.P.F. (COMB)	1
038	423X9697	CC CHIP12 JF1H 103Z.XV	1 1	FL005	71905020	JUMPER LINE PFW-01-10	1
039	423X9228	CC CHIP JF1E 224Z,XV	1 1	FL007	61828041	170nS DELAY LINE (FC=6MHZ)	1
040	430A8325	CE04C1E3R3-5BSRE, AT	1	FL009	61828041	170nS DELAY LINE (FC=6MHZ)	1
041	423X9705	CC CHIP12 JF1H 223Z.XV	11 1	FL010	61828044	EMI FILTER 223	1
042	430A8318	CE04C1C100-5BSRE, AT	11 1	FL011	61828044	EMI FILTER 223	1
043	430A8325	CE04C1E3R3-5BSRE, AT	li l	FL012	61828044	EMI FILTER 223	1
044	423X9705	CC CHIP12 JF1H 223Z.XV	i	FL013	61828044	EMI FILTER 223	1 1
045	430A8325	CE04C1E3R3-5BSRE, AT		FL1408	61828043	300nS DELAY LINE (4.43)	l i
046	423X9697		1 ' 1			4,43MHZ B.P.F.	li
047	423X9228	CC CHIP12 JF1H 103Z.XV		FL1409	61828042	IC M51386L COMB DISPOTION	1 1
047		CC CHIP JF1E 224Z,XV		IC001	37101449		1 1
	430A8325	CE04C1E3R3-5BSRE, AT		IC001	37151496	MOS M34201-110 PLCD REM2	1 .
049	423X9705	CC CHIP12 JF1H 223Z.XV	1	IC002	37101468	IC CX22013 (LOGI COMB)	1 1
050	430A8318	CE04C1C100-5BSRE, AT	1	IC003	37101448	IC NJM78M09FA	1
051	430A8325	CE04C1E3R3-5BSRE, AT	1 1	IC004	37101467	IC CXL1009P (CCD)	1
052	423X9705	CC CHIP12 JF1H 223Z.XV	[1 L	IC005	37101467	IC CXL1009P (CCD)	1
053	430A8318	CE04C1C100-5BSRE, AT	li l	IC006	37101467	IC CXL1009P (CCD)	1
054	423X9221	CC CHIP12 JF1E 104Z,XV	li l	IC007	37101467	IC CXL1009P (CCD)	1
055	430A8325	CE04C1E3R3-5BSRE, AT	li l	IC1418	37101159	LA7016 ANALOG SW	1

DS6000G(2) SERVICE MANUAL

"Use this MANUAL together with DS6000G manual"

As for the DS6000G(2) only changed parts are described, since this model is basically the same as the DS6000G.

	DS6000G		DS6000G(2)
NO.	Contents	page	changed Parts
1.	PRECAUTIONS AND INSTRUCTIONS MANUAL	1-1	4
2.	DISASSEMBLY	2-1	←
3.	ADJUSTMENT	3-1	←
4.	BLOCK AND SCHEMATIC DIAGRAM		
	2-7. VIDEO SCHEMATIC DIAGRAM VIDEO-Y	4-15	NEW
	VIDEO SCHEMATIC DIAGRAM VIDEO-C	4-17	NEW
	PAL 3LINE COMB FILTER		NEW
5.	EXPLODED VIEW	5-1	
6.	REPLACEMENT PARTS LIST	6-1	
	(lists up the parts exclusively used in the Model DS6000G(2).)		
	NOTE:		
	This shows the special parts used for DS6000G(2) only. Please refer to the Service Manual		
	of DS6000G for the other parts.		